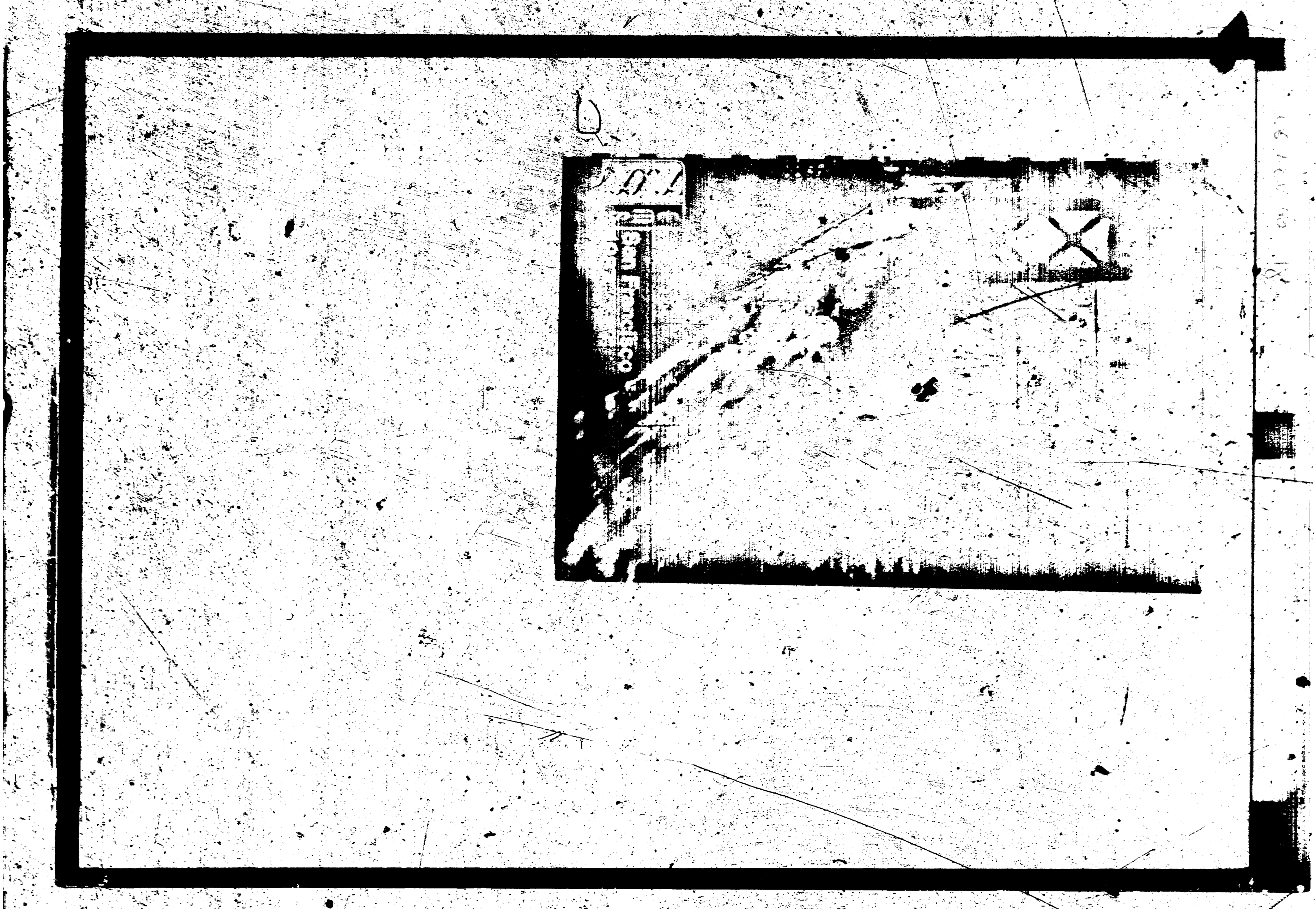

2501644824

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

ENVIRONMENTAL MUTAGEN SOCIETY

Eighteenth Annual Meeting

April 8-12, 1987
Hilton Hotel, San Francisco, CA

The ENVIRONMENTAL MUTAGEN SOCIETY was founded in 1969 and incorporated under the laws of the District of Columbia. It is operated to encourage the study of mutagens in the human environment - particularly as they may affect public health - and to engage in and sponsor research, study, and dissemination of information related to this problem. Membership is open to all interested scientists.

********** OFFICERS **********

President	JOHN A. HEDDLE, York University (1987)
President Elect	ANTHONY V. CARRANO, Lawrence Livermore National Laboratory (1987)
Secretary	ROSALIE K. ELESPURU, National Cancer Institute Frederick Cancer Research Facility (1989)
Treasurer	JAMES T. MAC GREGOR, USDA Western Regional Research Center (1989)

Meeting Manager

Diane Taub

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

The San Francisco-Oakland Bay Bridge celebrates its 50th birthday on November 15, 1986 with a fireworks display. It took 3.5 years and 6,500 workers to build at a cost of $77,200,000. At the time it was built, it was the longest bridge over navigable water in the world - 8 miles including its two approaches. It contains more than 70,000 miles of cable which holds the double deck 216 feet above the water. As the bridge crosses from San Francisco to Oakland and Berkeley, its roadway passes through a 500 foot tunnel on Yerba Buena Island. Although the bridge carries more than 40 million cars a year, the average rush-hour trip takes much longer than the ferry running time of the 1930s. Visitors to San Francisco in 1987 can enjoy the night time beauty of a special chain of lights celebrating the anniversary of this great bridge.

PLEASE DON'T FORGET YOUR PROGRAM OR ABSTRACT BOOKLET

Extra copies will cost $5.00 each.

NOTES

1. All sessions will be held in the Continental Ballroom area of the Hilton.
2. Smoking is not permitted in the Session Rooms.
3. All coffee breaks will be in the Ballroom Foyer or Poster Sessions.
4. The phone number of the San Francisco Hilton Hotel is: 415-771-1400.
5. Council Meetings are scheduled as follows:

Tuesday, 7 April	2:00 pm	9:00 pm	Rosewood Room
Sunday, 12 April	9:00 am	1:00 pm	Rosewood Room

6. PLEASE REMEMBER to check the Message Board in the Registration Area (Ballroom foyer) frequently. Changes in the Program, including room assignments, special announcements, and messages will be posted there. In addition, please feel free to use the Message Board to leave messages for other attendees. If you wish to post any other material, please check at the Registration Desk first.

2501644826

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

COUNCILORS

Michael D. Shelby (1987)
(Past President)
James W. Allen (1989)
Angela F. Auletta (1987)
Larry D. Claxton (1988)
James M. Gentile (1989)
Barry D. Gilchrist (1987)
Regine Goth Goldstein (1988)
Robert H. Haynes (1988)
Henry E. Holden (1987)
Barry H. Margolin (1989)
J. Justin McCormick (1987)
Brian C. Myhr (1989)
J. Patrick O'Neill (1988)
Conrad A. Schreiner (1989)
Larry H. Thompson (1988)
R.C. Van Buskirk (1987)

PROGRAM COMMITTEE

Brigitte B. Brandriff
Anthony V. Carrano (Chairman)
Leilani K. Corell
Eugene L. Elmore
Barton L. Gledhill
Regine Goth Goldstein
James S. Pelton
Irene M. Jones
Mortimer L. Mendelsohn
Dennis A. Pagano
Larry H. Thompson
James D. Tucker
Andrew J. Wyrobek
Janice Yager

REGISTRATION FEES

	PRE-REGISTRATION	ON-SITE REGISTRATION
Members	$80.00	$90.00
Non-members	$90.00	$100.00
Student (member)	$20.00	$25.00
Student (non-member)	$25.00	$30.00
Spouse	$10.00	$15.00

2501644827

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90

********** PATRONS AND SUSTAINING MEMBERS **********

The Council of the Society may elect a corporation a Patron or Sustaining Member as a result of demonstrated and substantiated facts benefiting the Society and its purposes.

The following is a list of corporations making contributions or joining the Society as Patrons or Sustaining Members. This listing contains 1986 Members as well as new 1987 Members.

ARTHUR D. LITTLE, INC.
Representative: Andrew Sivak

BELLCO GLASS, INC.
Representative: Jack McLaughlin

BURROUGHS WELLCOME COMPANY
Representative: Ron Guilkey

CELANESE CORPORATION
Representative: John J. Clary

CHEVRON ENVIRONMENTAL HEALTH CENTER INC.
Representative: J.A. MacGregor

CIBA GIEGY CORPORATION
Representative: Jo Anne Munigle

E.I. DU PONT DE NEMOURS AND COMPANY
Representative: Awni Sarrif

ELI LILLY AND COMPANY
Representative: Merle Amundson

EXXON CORPORATION
Representative: Robert Scala

G.D. SEARLE AND CO.
Representative: Paul D. Klimstra

HAZLETON LABORATORIES AMERICA, INC.
Representative: David J. Brusick

HERCULES, INC.
Representative: Richard Wantz

2501644828

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 tx

CELL BIOLOGY AND TOXICOLOGY

A Quarterly International Journal
Gary M. Williams, M.D., Editor-in-Chief
Published by Princeton Scientific Publishing Co., Inc.

THE OFFICIAL ORGAN OF THE GENETIC TOXICOLOGY ASSOCIATION

EDITORS

James W. Bridges
James L. Byard
Erik Dybing
Silvio Garattini
Curtis C. Harris
Lubomir S. Hnilica
Akira Ichihara
Richard Irons
David Jacobson-Kram
Lawrence A. Loeb
Hans Marquardt
Prudent Padeu
Anthony E. Pegg
M. B. Robertroid
Gerhard Schreiner
Hans Stich
James Trosko
Gerhard Zbinden

EDITORIAL BOARD

John Ashby
Angela Aubletta
Herman Autrup
R. John Ballard
J. Carl Barrett
N. C. Bols
Ellen Borenfreund
Martine Chessebeuf
Francesco Clementi
Rodger Curren
Bjorn Ekwall
Rudolf Fabrigo
John L. Farber
Michael G. Farrow
Norbert Fusenig
Yoshiyuki Hashimoto
Aage Haugen
Paul Hochstein
Genevieve Krack
Bo Lambert
James W. Oldham
G. Prodi
James D. Regan
A. K. Sharma
Jörg Schoneich
Rudolf Thust
Benjamin F. Trump
J. Van Ryn
Susan S. Wallace
Sandra R. Wolman
Hiroshi Yamasaki

For information about subscriptions, group discounts and advertising, please contact

Princeton Scientific Publishing Co., Inc.
P.O. Box 2155
Princeton, New Jersey 08543
(609) 683-4750

2501644829

06 NOV 90 4/4

WEDNESDAY, 9:00 am WORKSHOP

RESEARCH NEEDS FOR THE GENOTOXICITY TESTING OF INDUSTRIAL CHEMICALS
Ballroom 5
9:00 am - 11:30 am
A.P. Li, Presiding

9:00

INTRODUCTION: PAST, PRESENT, AND FUTURE OF GENETIC TOXICOLOGY IN INDUSTRY
A.P. Li, Monsanto Company

9:20

NEED TO FILL PRESENT DATA GAPS
L.D. Kier, Monsanto Company

9:40

HUMAN TESTING SYSTEMS
F.B. Olasin, Bristol-Myers

10:00

BREAK

10:20

METABOLIC APPROACHES
R.H. Heflich, National Center for Toxicological Research

10:40

MOLECULAR APPROACHES
L.P. Stankowsky, Pharmacia Research International, Inc.

11:00

ROLE OF BASIC RESEARCH IN GENETIC TOXICOLOGY
R.J. Preston, Oak Ridge National Laboratory

11:20

GENERAL DISCUSSION

11:30

WEDNESDAY, 9:00 am WORKSHOP

PERSONAL COMPUTERS AND DATA MANAGEMENT SYSTEMS IN GENETIC TOXICOLOGY
Ballroom 6
9:00 am - 11:30 am
L. Williams and L.D. Claxton, Presiding

9:00

AVAILABILITY OF PC SOFTWARE FOR GENETIC TOXICOLOGY LABORATORIES
L. Claxton, U.S. EPA

9:45

DATA MANAGEMENT SYSTEMS IN GENETIC TOXICOLOGY - DEVELOPMENT OF SOFTWARE
T.K. Rao, Integrated Lab Systems

10:00

***SALMONELLA* ASSAY WORK GROUP RECOMMENDATIONS**
L. Kier, Monsanto Company

10:20

BREAK

10:30

STATISTICAL PROCEDURES/SOFTWARE DESIGN AND DEVELOPMENT FOR THE *SALMONELLA* ASSAY
B. Shah, Research Triangle Institute and N. Adams, Integrated Lab Systems

11:15

GENERAL DISCUSSION

11:30

2501644830

06 NOV 90 4y

WEDNESDAY, 9:00 am WORKSHOP

THE SPOT TEST WITH MICE
Parlors 1-3
9:00 am - 11:30 am
R. Fabrig and L.B. Russell, Presiding

9:00

INTRODUCTION
L.B. Russell, Oak Ridge National Laboratory

9:20

CURRENT DEVELOPMENT OF THE METHOD
R. Fahrig, Fraunhofer-Institut für Toxikologie und Aerosolforschung, FRG

9:50

CORRELATION OF TRANSPLACENTALLY INDUCED GENETIC ALTERATIONS AND TUMOR INCIDENCE
A. Neuhäuser-Klaus and A. Lux, Gesellschaft für Strahlen- und Umweltforschung, FRG

10:20

PRACTICAL APPLICATION TO INDUSTRY
R. Lang, Schering AG, Berlin

10:50

REGULATORY RULES AND IMPROVEMENT OF APPLICABILITY
J. Hass, National Agency of Environmental Protection, Copenhagen

11:20

GENERAL DISCUSSION

11:30

2501644831

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 48

WEDNESDAY, 1:00 PM
Ballroom 5

MOLECULAR MECHANISMS - PROKARYOTES
B.W. Glickman and E.C. McCoy, Presiding

1:00
BIOEFFECTS OF PURE EXOGENOUS SINGLET OXYGEN ($^1\Delta_gO_2$): POTENT CYTOTOXICITY AND FAILURE TO CAUSE MUTATIONS IN BACTERIA.
T.A. Dahl, P.E. Hartman, W.R. Midden, The Johns Hopkins University, Baltimore, MD

1:15
MUTATIONAL SPECIFICITY OF MNU AND ENU IN THE *lacI* GENE OF *E. coli*
P.A. Burns, A.J.E. Gordon, B.W. Glickman, York University, Toronto, Ontario, Canada

1:30
ANALYSIS OF DNA BASE CHANGES IN *SALMONELLA* REVERTANTS INDUCED BY MUTAGENS DERIVED FROM FOODS
R. Wu, N.H. Shen, S.K. Healy, J.C. Fuscoe, J.S. Felton (Introd. by M. Mendelsohn), Lawrence Livermore National Laboratory, Livermore, CA

1:45
BLEOMYCIN INDUCED BASE SUBSTITUTIONS IN THE LAMBDA *cI* GENE
L.F. Povirk, Medical College of Virginia, Richmond, VA

WEDNESDAY, 1:00 PM
Ballroom 6

CYTOGENETIC MECHANISMS
W.J. Bodell and M.E. Gaulden, Presiding

1:00
PRE-EXPOSURE OF HUMAN LYMPHOCYTES TO 1 RAD (1cGy) OF X-RAYS DECREASES THE CYTOGENETIC DAMAGE INDUCED BY AGENTS THAT INDUCE DNA DOUBLE STRAND BREAKS AND CROSSLINKS, BUT ACT SYNERGISTICALLY WITH MMS
S. Wolff, V. Afzal, J. Wiencke, G. Olivieri, University of California, San Francisco, CA and University of Rome, Rome, Italy

1:15
THE INDUCTION OF THE ADAPTIVE RESPONSE IN HUMAN LYMPHOCYTES BY X RAYS IS DEPENDENT ON RADIATION INTENSITY
J.K. Wiencke, J.D. Shadley, University of California, San Francisco, CA

1:30
THE EFFECT OF INCORPORATION OF BASE ANALOGUES ON THE NUMBER AND TYPE OF X-RAY INDUCED CHROMOSOME ABERRATIONS
G.J. Hook and R.J. Preston, University of Tennessee and Oak Ridge National Laboratory, Oak Ridge, TN

1:45
ANTIPAIN MEDIATED SUPPRESSION OF X RAY INDUCED CHROMOSOMAL ABERRATIONS IN HUMAN LYMPHOCYTES
V. Afzal, J.K. Wiencke, S. Wolff, University of California, San Francisco, CA

2501644832

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 78

WEDNESDAY, 1:00 PM
Parlors 1-3

HUMAN POPULATION MONITORING
B. Brandhoff and G.R. Douglas, Presiding

1:00
VALIDITY OF THE AUTORADIOGRAPHIC ASSAY FOR QUANTITATING MUTANT T-LYMPHOCYTES IN HUMAN BLOOD
C.J. Greene, L.M. Sullivan, J.K. Berman, J.P. O'Neill, R.J. Albertini, University of Vermont, Burlington, VT

1:15
VARIANT FREQUENCIES: CONFIDENCE INTERVALS AND STUDY GROUP COMPARISONS IN EPIDEMIOLOGICAL INVESTIGATIONS USING RATIO ESTIMATORS
E.B. Wharton, Jr., M.M. Ammenheuser, J.B. Ward, Jr., The University of Texas Medical Branch, Galveston, TX

1:30
HUMAN MUTAGENS: EVIDENCE FROM PATERNAL EXPOSURE?
G.R. Douglas, D.H. Blakey, E.R. Nestmann, S.A. Narod, Health and Welfare Canada, Ottawa, Ontario, Canada, Cyanamid Canada Incorporated, Willowdale, Ontario, Canada, and University of Ottawa, Ontario, Canada

1:45
MONITORING CYTOGENETIC DAMAGE IN MAN: MICRONUCLEATED ERYTHROCYTES IN CIRCULATING BLOOD ARE A SENSITIVE INDEX OF CHROMOSOMAL DAMAGE IN SPLENECTOMIZED SUBJECTS
J.T. MacGregor, C.M. Wehr, P.A. Smith, K. Hooper, L. Goldman, D. Smith, C. Becker, R. Hiatt, B. Peters, R. Everson, University of California, Berkeley, CA, California Department of Health Services, San Francisco General Hospital, San Francisco, CA, Kaiser Permanente Medical Care Program, Oakland, CA, and NIEHS, RTP, NC

WEDNESDAY, 1:00 PM
Parlors 7-9

MAMMALIAN CELL MUTAGENESIS
M.L. Meltz and G.J. Rudd, Presiding

1:00
A MULTIPLE END-POINT ANALYSIS OF GENOTOXICITY AND CYTOTOXICITY OF ERYTHROSINE IN V79 CELLS
B.G. Boyes, C.G. Rupert, T. Matula, C. Heroux-Metcalf, Health and Welfare Canada, Ottawa, Ontario, Canada

1:15
USE OF 6TG-RESISTANCE IN WILD TYPE MOUSE LYMPHOMA L5178Y CELLS FOR GENE-MUTAGEN SCREENING
R.C. Garner, J. Campbell, D.J. Kirkland, J.C. Kennedy, Microtest Research Limited, Heslington, York, United Kingdom

1:30
AN *IN SITU* ASSAY FOR CHEMICALLY-INDUCED TRIFLUOROTHYMIDINE (TFT) RESISTANT MUTANTS OF L5178Y TK⁺ MOUSE LYMPHOMA CELLS
G.J. Rudd, K. Pardo, K.L. Allen, W.F. Blazak, W.J. Caspary, SRI International, Menlo Park, CA and NIEHS, Research Triangle Park, NC

1:45
THE ROLE OF TARGET GENE LOCATION IN THE RECOVERY OF INTRALOCUS VS. INTERLOCUS MUTATIONS IN MAMMALIAN CELLS
K.H. Brock, A.L. Amtower, K.L. Dearfield, M.M. Moore, Environmental Health Research and Testing, Research Triangle Park, NC and U.S. Environmental Protection Agency, Washington, DC, and Research Triangle Park, NC 1c

2501644833

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90

WEDNESDAY, 2:00 PM
Ballroom 5

MOLECULAR MECHANISMS - PROKARYOTES
B.W. Glickman and E.C. McCoy, Presiding

2:00
FRAMESHIFT MUTAGENESIS BY CHLOROQUIN PHOSPHATE IN *SALMONELLA TYPHIMURIUM* AND *ESCHERICHIA COLI*
D.G. Macphee, S.M. Thomas, K.A. Silburn, La Trobe University, Bundoora, Victoria, Australia

2:15
INTERACTION OF MISMATCH REPAIR WITH 2-AMINOPURINE MUTAGENESIS
R.G. Fowler, San Jose State University, San Jose, CA

2:30
MUTAGENIC ACTIVITY OF N-NITROSOMETHYLANILINE AND N-NITROSODIPHENYLAMINE IN *SALMONELLA TYPHIMURIUM* TA104 AND RELATED STRAINS
M. Zelenska, J.E. Guttenplan, New York University, New York, NY

2:45
***SALMONELLA TYPHIMURIUM* TA100 DERIVATIVES WITH AN UNUSUAL SPECTRUM OF MUTAGENIC RESPONSES**
E.C. McCoy, M.A. McCartney, M.E. Anderson, Case Western Reserve University, Cleveland, OH

WEDNESDAY, 2:00 PM
Ballroom 6

CYTOGENETIC MECHANISMS
W.J. Bodell and M.E. Gaulden, Presiding

2:00
MONOFUNCTIONAL ALKYLATING AGENT-INDUCED INCOMPLETE DNA REPLICATION: POSSIBLE RELATION TO CYTOGENETIC DAMAGE
J.L. Schwartz, University of Chicago, Chicago, IL

2:15
DIRECT ACTION OF MUTAGENS ON SPECIFIC CHROMOSOMAL PROTEINS (TOPOISOMERASE II AND PERIPHERAL PROTEINS) IS RESPONSIBLE FOR CHROMOSOME STICKINESS
M.E. Gaulden, University of Texas Health Science Center, Dallas, TX

2:30
QUANTITATIVE SCE ANALYSIS BY COUPLING METABOLIC RESTRICTION WITH TRICOLOR DIFFERENTIAL FPG STAINING
R.J. DuFrain, W.T. Bickler, Jr., Allied Signal Incorporated, Morristown, NJ

2:45
MOLECULAR DOSIMETRY OF SISTER CHROMATID EXCHANGE INDUCTION BY ALKYLATING AGENTS AND ITS IMPLICATIONS FOR ENVIRONMENTAL MONITORING
W.J. Bodell, University of California, San Francisco, CA

3:00 - 3:30 COFFEE BREAK

2501644834

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 4/7

WEDNESDAY, 2:00 PM
Parlors 1-3

HUMAN POPULATION MONITORING
B. Brandriff and G.R. Douglas, Presiding

2:00
COMPARISONS OF SISTER CHROMATID EXCHANGES, CHROMOSOMAL ABERRATIONS, AND GLYCOPHORIN-A NULL VARIANT ERYTHROCYTES IN WOMEN RECEIVING CHEMOTHERAPY FOR BREAST CANCER
A.J. Wyrobek, A.V. Carrano, W.L. Bigbee, J.D. Tucker, R.G. Langlois, R.H. Jensen, R.B. Everson, Lawrence Livermore National Laboratory, Livermore, CA and National Institute of Environmental Health Sciences, Research Triangle Park, NC

2:15
INDUCTION, ACCUMULATION, AND PERSISTENCE OF CYTOGENETIC CHANGES IN LYMPHOCYTES OF PATIENTS RECEIVING CHEMOTHERAPY FOR BREAST CANCER
J.D. Tucker, R.B. Everson, A.J. Wyrobek, A.V. Carrano, M.L. Christensen, J.T. Carpenter, LLNL, Livermore, CA, NIEHS, RTP, NC, and University of Alabama, Birmingham, AL

2:30
CHEMOTHERAPY WITH MUTAGENIC AGENTS ELEVATES THE *IN VIVO* FREQUENCY OF GLYCOPHORIN A "NULL" VARIANT ERYTHROCYTES
W.L. Bigbee, R.G. Langlois, R.H. Jensen, A.W. Wyrobek, R.B. Everson, LLNL, Livermore, CA and NIEHS, RTP, NC

2:45
SPERM CHROMOSOMAL ANALYSIS IN A SURVIVOR OF SEMINOMA AND ASSOCIATED RADIOTHERAPY
B. Brandriff, L.A. Gordon, J. Sharlip, A.V. Carrano, Lawrence Livermore National Laboratory, Livermore, CA and Children's Hospital, Oakland, CA

WEDNESDAY, 2:00 PM
Parlors 7-9

MAMMALIAN CELL MUTAGENESIS
M.L. Meltz and C.J. Rudd, Presiding

2:00
MUTAGENESIS BY DNA CROSSLINKING AGENTS IN FANCONI'S ANEMIA LYMPHOBLASTOID CELLS
K. Tatsumi, M. Toyoda, A. Tachibana, R. Ishida, H. Takebe, Kyoto University, Kyoto, Japan and Aichi Cancer Center Research Institute, Nagoya, Japan

2:15
COMPARISON OF THE FREQUENCY OF 6TG-RESISTANT HUMAN T-LYMPHOCYTES INDUCED BY ETHYLNITROSOUREA (ENU), BENZO[a]PYRENE-7,8-DIOL-9,10-EPOXIDE (BPDE), UV AND ^{60}Co RADIATION
T. Nomura, J.S. Kimball, S. Michaud, V.M. Maher, J.J. McCormick, Michigan State University, East Lansing, MI

2:30
THE EFFECT OF 2.45 GHz RADIOFREQUENCY RADIATION (RFR) ON PROFLAVIN INDUCED MUTAGENESIS IN L5178Y CELLS
M.L. Meltz, P. Eagan, D.N. Erwin, University of Texas Health Science Center and USAF School of Aerospace Medicine, San Antonio, TX

2:45
EFFECTS OF HEAVY ION RADIATION ON SOMATIC MUTATION AND DNA TRANSFECTION
T.C. Yang, C.A. Tobias, Lawrence Berkeley Laboratory, Berkeley, CA

3:00 - 3:30 COFFEE BREAK

2501644835

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

WEDNESDAY, 3:30 pm - 5:30 pm SYMPOSIUM

MOLECULAR BIOLOGY OF DNA REPAIR

Ballroom 3 Regine Goth-Goldstein, Presiding

Sponsor: Arthur D. Little, Inc.

To prevent death, mutations and cancer, cells have evolved complex pathways for repair of DNA damage. In bacteria, several independent regulatory networks that are induced in response to DNA damage and stress have been identified. In yeast, three main pathways of DNA repair have been described, and many of the genes involved have been cloned allowing detailed analysis of the processes. Recently, some human DNA repair genes which affect different pathways have been transfected into repair deficient rodent cells and are being characterized. Preferential repair of damage in transcriptionally active genes also has been demonstrated in mammalian cells, and it appears that damage processing in active genes rather than overall repair correlates best with biological endpoints.

3:30 DAMAGE INDUCIBLE RESPONSES IN BACTERIA
Graham Walker
Massachusetts Institute of Technology

4:00 CHARACTERIZING YEAST DNA REPAIR BY USE OF CLONED GENES
David Schild
Lawrence Berkeley Laboratory

4:30 MAPPING, ISOLATION, AND CHARACTERIZATION OF HUMAN DNA REPAIR GENES
Larry Thompson
Lawrence Livermore National Laboratory

5:00 INTRAGENOMIC HETEROGENEITY IN MAMMALIAN DNA REPAIR
Philip Hanawalt
Stanford University

2501644836

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

WEDNESDAY, 5:30 pm - 8:00 pm PUBLIC SYMPOSIUM

BHOPAL - GENETIC CONSEQUENCES ???

Ballroom 5 Henry E. Holden, Presiding

Sponsors: The Laboratory of Radiobiology and Environmental Health of the University of California, San Francisco

Environmental Health Research and Testing Laboratory of Lexington, Kentucky

---

The past forty years has seen an increasing number of incidences where large populations have been exposed to mutagenic or potentially mutagenic substances. Disasters such as those that occurred at Bhopal, Chernobyl, Seveso and Hiroshima/Nagasaki have led to great concern over the impact of widespread exposure to substances which may or may not have genetic consequences in the survivors both in terms of increased cancer risk and in terms of the genetic disease burden over several generations. This symposium will address the state of the art genetic research dealing with these issues.

This Symposium will be open to the public and questions from the audience will be welcome in the concluding panel discussion.

5:30 INTRODUCTORY REMARKS
Henry Holden
Pfizer Inc.

5:40 ASSESSING GENOTOXICITY IN HUMAN POPULATIONS: TOOLS, TACTICS AND TRUTH
Richard Albertini
University of Vermont

6:30 GENETIC TOXICITY OF METHYL ISOCYANATE
Michael Shelby
National Institute of Environmental Health Sciences

7:20 COMMENTARY AND SUMMARY
Herbert Rosenkranz
Case Western Reserve University

7:30 PANEL DISCUSSION

2501644837

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

EX. NOV 90 18

THURSDAY, 8:30 AM
Ballroom 5

CYTOGENETIC METHODS
V.L. Sawin and J.W. Yager, Presiding

8:30
NONRANDOM KILLING OF T-LYMPHOCYTES IN CRYOPRESERVATION
G.H.S. Strauss, W.L. Stanford, U.S. Environmental Protection Agency and Environmental Health Research and Testing, Research Triangle Park, NC

8:45
A RAT LIVER MICRONUCLEUS ASSAY EMPLOYING 4AAF AS MITOGEN
J. Ashby, I. Braithwaite, Imperial Chemical Industries Plc, Alderley Park, Macclesfield, Cheshire, UK

9:00
EVALUATION OF THE CYTOKINESIS BLOCK MODIFICATION OF THE PERIPHERAL LYMPHOCYTE MICRONUCLEUS METHOD
J.W. Yager, M. Sorsa, University of California, Berkeley, CA and Institute of Occupational Health, Helsinki, Finland

THURSDAY, 8:30 AM
Ballroom 6

CYTOGENETIC TESTING I
J. Nath and E.B. Whorton, Jr., Presiding

8:30
SISTER CHROMATID EXCHANGE STUDIES IN PRIMARY MOUSE BONE MARROW AND SPLEEN CELL CULTURES
L.M. Soler, G. Krishna, J. Nath, T. Ong, West Virginia University and National Institute for Occupational Safety and Health, Morgantown, WV

8:45
A COMPARATIVE CYCLOPHOSPHAMIDE-INDUCED SISTER CHROMATID EXCHANGE PERSISTENCE IN MOUSE BONE MARROW AND SPLEEN CELLS
G. Krishna, J. Nath, T. Ong, National Institute for Occupational Safety and Health, and West Virginia University, Morgantown, WV

9:00
CLASTOGENIC EFFECT OF ACRYLAMIDE IN MOUSE BONE MARROW
L.D. Adler, U. Kliesch, Institut fur Gesuth, Neuherberg, Federal Republic of Germany

2501644838

06 NOV 80 18

THURSDAY, 8:30 AM
Parlors 1-3

COMPLEX MIXTURES I
P. Flessel and J. Lewtas, Presiding

8:30
COUPLING OF MICROSUSPENSION MUTAGENICITY ASSAYS WITH HPLC TO PRODUCE BIOASSAY CHROMATOGRAMS (MUTAGRAMS) OF COMPLEX MIXTURES
J. Lewtas, J. Chappell, D. DeMarini, J. Inmon, L. King, T. Claxton, K. Williams, U.S. Environmental Protection Agency, Research Triangle Park, NC

8:45
MUTAGENICITY OF COMBUSTION PARTICLES FROM SEVERAL COMMON BIOMASS FUELS
D.A. Bell, K.R. Smith, R.M. Kamens, University of North Carolina, Chapel Hill, NC and East West Center, Honolulu, HI.

9:00
MUTAGENICITY OF COMPLEX MIXTURES OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH) PRESENT IN THE STANDARD REFERENCE MATERIAL (SRM) 1649
A.S. Raj, M. Katz, York University, Toronto, Ontario, Canada

THURSDAY, 8:30 AM
Parlors 7-9

CELL TRANSFORMATION
J.R. Landolph and J.W. Spalding, Presiding

8:30
EFFECT OF CELL DENSITY UPON FREQUENCIES OF C3H/10T1/2 CELL TRANSFORMATION INDUCED BY N-METHYL-N'-NITRO-N-NITROSOGUANIDINE
C.J. Boreiko, D.J. Abernethy, Chemical Industry Institute of Toxicology, Research Triangle Park, NC

8:45
GENOTOXICITY OF ASPIRIN, PHENACETIN AND ACETAMINOPHEN IN C3H/10T1/2 MOUSE EMBRYO CELLS
S.R. Paterno, J.R. Landolph, University of Southern California, Los Angeles, CA

9:00
ONCOGENIC TRANSFORMATION AND GENOTOXICITY FROM PARAQUAT GENERATED SUPEROXIDE RADICAL ALONE AND COMBINED WITH GAMMA-IRRADIATION IN BALB/C 3T3 AND C3H/10T1/2 CELLS
C.R. Geard, M. Georgsson, M. Travisano, Columbia University, New York, NY

2501644839

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 1 bv 90 tyt

THURSDAY, 9:15 AM
Ballroom 5

CYTOGENETIC METHODS
V.L. Sawin and J.W. Yager, Presiding

9:15
FLOW CYTOMETRY AS A SHORT TERM ASSAY FOR *IN VIVO* CLASTOGENICITY: EFFECTS IN VARIOUS TISSUES
V.L. Sawin, K. McBee, J.W. Bickham, Shell Development Company, Houston, TX and Texas A&M University, College Station, TX

9:30
FLOW CYTOMETRY AS A SHORT TERM ASSAY FOR *IN VIVO* CLASTOGENICITY: RESPONSE WITH TIME
V.L. Sawin, K. McBee and J.W. Bickham, Shell Development Company, Houston, TX and Texas A&M University, College Station, TX

9:45
A NOVEL ASSAY FOR DETECTING CLASTOGENIC EFFECTS USING A MONOCHROMOSOMAL HYBRID CELL LINE
S.S. Sandhu, R.S. Athwal, U.S. Environmental Protection Agency, Research Triangle Park and University of Medicine and Dentistry of New Jersey, Newark, NJ

THURSDAY, 9:15 AM
Ballroom 6

CYTOGENETIC TESTING I
J. Nath and E.B. Whorton, Jr., Presiding

9:15
BENZENE INDUCES CHROMOSOME ABERRATIONS IN SPERMATOGONIAL STEM CELLS OF CHRONICALLY EXPOSED MICE
K. Rithidech, W.W. Au, V.M.S. Ramanujam, E.B. Whorton, Jr., M.S. Legator, The University of Texas Medical Branch, Galveston, TX

9:30
INDUCTION OF CHROMOSOME ABERRATIONS IN HUMAN FIBROBLASTS PERMISSIVELY INFECTED WITH HUMAN CYTOMEGALOVIRUS
S.A. Bakar, T. Albrecht, W.W. Au, M.S. Legator
The University of Texas Medical Branch, Galveston, TX

9:45
PROLIXIN INCREASES CHROMOSOME DAMAGE AND SISTER CHROMATID EXCHANGES IN CULTURED HUMAN LYMPHOCYTES
D.A. Shafer, B. Cambler, P.M. Smith, V.G. Dunbar, A. Falck, Georgia Mental Health Institute and Emory University, Atlanta, GA

10:00 - 10:30 COFFEE BREAK

2501644840

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 Nov 90 tyr

THURSDAY, 9:15 AM
Parlors 1-3

COMPLEX MIXTURES I
P. Fleuel and J. Lewtas, Presiding

9:15
SEASONAL VARIATIONS AND TRENDS IN CONCENTRATIONS OF AIR PARTICLE MUTAGENS IN CONTRA COSTA COUNTY, CA
P. Fleuel, Y.Y. Wang, K. Chang, California Department of Health Services, Berkeley, CA

9:30
THE INTEGRATED AIR CANCER PROJECT: MUTAGENICITY OF WOODSMOKE IMPACTED AIR SHEDS
B. Andon, S. Warren, L. Claxton, L. Cupitt, R. Highsmith, R. Zweidinger, R. Stevens, J. Lewtas, Environmental Health Research and Testing, Incorporated and U.S. Environmental Protection Agency, Research Triangle Park, NC

9:45
CYTOGENETIC DAMAGE TO FISH CELLS AND EMBRYOS FOLLOWING EXPOSURE TO CONTAMINATED SEA/SURFACE MICROLAYER
R.M. Kocan, M.L. Landon, University of Washington, Seattle, WA

THURSDAY, 9:15 AM
Parlors 7-9

CELL TRANSFORMATION
J.R. Landolph and J.W. Spalding, Presiding

9:15
THE EFFECT OF CELL PASSAGE ON THE DEMONSTRATION OF VOMITOXIN-INDUCED MORPHOLOGICAL TRANSFORMATION IN BALB/3T3 A31-1-1 CELLS
C.W. Shen, F.M. Moreland, V.C. Dunkel, Division of Toxicology, CFSAN/FDA, Washington, DC

9:30
A COMPARATIVE EVALUATION OF SEVENTEEN CARCINOGENS AND NON-CARCINOGENS IN FOUR MAMMALIAN CELL TRANSFORMATION ASSAYS
J.W. Spalding, S. Stasiewicz, R.W. Tennant, CG/TR/National Institute of Environmental Health Sciences, Research Triangle Park, NC

9:45
POTENTIAL CARCINOGENICITY OF EXTRACTS OF COAL AND WOOD SMOKE EMISSIONS AS DETERMINED BY THEIR ABILITY TO INDUCE SURVIVAL IN CELLULAR AGGREGATES
W.A. Suk, M.A. Chapman, J.D. Van Arnold, J.L. Mumford, Northrop Services, Incorporated, and the U.S. Environmental Protection Agency, Research Triangle Park, NC

10:00 - 10:30 COFFEE BREAK

2501644841

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 . tx

Genetic Toxicology Testing Service

A complete genetic toxicology service for the detection of toxic, mutagenic, clastogenic and carcinogenic activity in well-characterized test systems. An invaluable aid in product development and safety evaluations of new compound formulations and complex mixtures applicable to pharmaceuticals, medical devices, pesticides, cosmetics, industrial chemicals, petroleum products, and food additives.

- Gene Mutations in Bacteria
- Mutations in Mammalian Cells
- *In Vitro* Teratology
- DNA Damage and Repair
- Cytogenetics *In Vitro/In Vivo*
- *In Vitro* Cell Transformation

Additional Laboratory Services

Toxicology

- Acute, Subchronic, Chronic Toxicology
- Inhalation Toxicology
- Immunotoxicology
- S-9 Microsomal Preparations

Diagnostics

- Laboratory Animal Diagnostics
- Biotechnology Materials Testing
- Mycoplasma Testing

For information, call Customer Services at (301) 654-1400 or write to

MICROBIOLOGICAL ASSOCIATES INC.

5221 River Road, Bethesda, MD 20816

2501644842

06 NOV 90 tyA

THURSDAY, 9 APRIL, 1987
Ballroom 4
10:30 AM - 12:00 PM

POSTER SESSION I

Posters are to be set up by 9:00 am of their scheduled day, and to remain up for viewing until 5:00 pm. It is required that an author be present during the scheduled poster session.

MAMMALIAN CELLS *IN VITRO*

1
SENSITIVITY TO THE CYTOTOXIC AND MUTAGENIC EFFECTS OF NITROSOPYRENE ARE REVERSED IN L5178Y STRAINS LYR AND LY-S
H.H. Evans, J. Mem, P.C. Howard
Case Western Reserve University, Cleveland, OH

2
IDENTIFICATION AND ISOLATION OF MAMMALIAN CELL CLONES CONTAINING NON-SELECTABLE AMPLIFIED, TRANSFECTED OR EXPRESSED SEQUENCES
T.G. Rossman, I.M. Rubin
New York University Medical Center, New York, NY

3
APHIDICOLIN INDUCED METHOTREXATE-RESISTANT MUTANTS IN CHINESE HAMSTER V79 CELLS
T. Moyl, C.C. Chang, J.E. Trosko
Michigan State University, East Lansing, MI

4
DELETION MUTATIONS ARE ASSOCIATED WITH THE DIFFERENTIAL MUTATIONAL RESPONSE OF THE AS52 AND CHO K1BH4 CELL LINES FOLLOWING TREATMENT WITH RADIO-MIMETIC DRUGS
K.R. Tindall, L.F. Stankowski, Jr.
National Institute of Environmental Health Sciences, Research Triangle Park, NC and Pharmakon Research International, Incorporated, Waverly, PA

5
EVALUATING COMPOUNDS FROM COOKED BEEF FOR GENOTOXICITY IN REPAIR DEFICIENT CHO CELLS
L.H. Thompson, S.A. Stewart, J.D. Tucker, E.P. Salazar, J.L. Minkler, A.V. Carrano, J.S. Felton
Lawrence Livermore National Laboratory, Livermore, CA

6
EVALUATIONS OF ANTITUMOR DRUGS FOR MUTAGENIC POTENTIAL IN THE CHO CELL SYSTEM
R.M. Baker, D. Sugg, F.J. Baumher III, J. Sarkili-Safer, R. Meegan
Grace Cancer Drug Center & Department of Experimental Therapeutics, Roswell Park Memorial Institute, Buffalo, NY

7
A CHO CELL LINE RESISTANT TO DEOXYCHOLIC ACID
G. Cuderal, E.W. Stuart, W.R. Bruce
Ludwig Institute for Cancer Research, Toronto, Ontario, Canada

2501644843

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 1/8

8
RESTRICTION ENZYME-INDUCED MUTATIONS IN CHO CELLS
G.J. Horsovsky, R.J. Preston
Oak Ridge National Laboratory and University of Tennessee Graduate School of Biomedical Sciences, Oak Ridge, TN

9
EVALUATION OF THE DIVISION ARREST METHOD OF THE CHO/HGPRT MUTATION ASSAY
Y. Oshiro, P.S. Balwierz, C.E. Piper
G.D. Searle & Company, Skokie, IL

10
DEVELOPMENT AND INVESTIGATION OF AN EXPANDED CHO/hprt LOCUS ASSAY
D. McGregor, C. Risch, P. Cattanach, W. Caspary
Inveresk Research International Limited, Musselburgh, Scotland and National Institute of Environmental Health Sciences, Research Triangle Park, NC

11
MODULATION OF CHEMICAL MUTAGENICITY BY RETINOIDS IN THE CHINESE HAMSTER OVARY/HYPOXANTHINE-GUANINE PHOSPHORIBOSYL TRANSFERASE SPECIFIC LOCUS MUTATION ASSAY
J.D. Budroe, H.M. Schul, J.G. Shaddock, D.A. Castiano
National Center for Toxicological Research, Jefferson, AR and The University of Arkansas, Little Rock, AR

12
DETECTION OF MAMMALIAN CELL MUTAGENESIS IN A549 CELLS
L.F. Stankowski, Jr., W.G. Tuman, E.G. Godek, R.J. Matthews, R.W. Naismith
Pharmakon Research International Incorporated, Waverly, PA

13
SPONTANEOUS VARIATION AND SOURCES OF ERROR IN THE CHO/HPRT ASSAY
L.F. Stankowski, Jr., E.G. Godek, W.G. Tuman, M.J. Biesiezad, E.E. Stec, T. Epinsky, R.J. Matthews, R.W. Naismith
Pharmakon Research International Incorporated, Waverly, PA

14
QUANTITATIVE AND MOLECULAR ANALYSES OF FORMALDEHYDE-INDUCED MUTATION IN MAMMALIAN CELLS
L.F. Stankowski, Jr., J.R. Sanschastian, W.G. Tuman, P.E. Giglio, M.J. Berta, R.J. Matthews, R.W. Naismith, K.R. Tindall
Pharmakon Research International Incorporated, Waverly, PA and National Institute of Environmental Health Science, Research Triangle Park, NC

15
EFFECT OF OXYGEN RADICAL SCAVENGERS ON SPONTANEOUS MUTATION RATE IN MAMMALIAN CELLS
L.F. Stankowski, Jr., W.G. Tuman, R.C. Nardone, R.J. Matthews, R.W. Naismith
Pharmakon Research International, Incorporated, Waverly, PA

2501644844

06 NOV 90

16
OPTIMIZATION OF AN S-9 ACTIVATION MIXTURE FOR THE L5178Y TK+ MOUSE LYMPHOMA MUTATION ASSAY
J.B. Majeska, D.W. Matheson
Stauffer Chemical Company, Farmington, CT

17
MUTAGENICITY OF TOPOISOMERASE-ACTIVE AGENTS DUE TO CLASTOGENIC MECHANISMS
M.M. Moore, R.H. Brock, C.L. Doerr, D.M. DeMarini
U.S. Environmental Protection Agency, and Environmental Health Research and Testing, Research Triangle Park, NC

18
HIGH RESOLUTION CYTOGENETIC ANALYSIS OF TK+ MUTANTS OF L5178Y TK+/-3.7.2C CELLS: VARIATION IN BREAKPOINTS AMONG q TK+ MUTANTS
J. Sawyer, M. Moore, J. Hozier
Clinical and Diagnostic Foundation, Corpus Christi, TX, U.S. Environmental Protection Agency, Research Triangle Park, NC, and Florida Institute of Technology, Melbourne, FL

19
IN SITU AND MOLECULAR ANALYSIS OF MUTATION AT THE TK LOCUS IN MOUSE L5178Y TK+/- 3.7.2C CELLS
M. Applegate, C. Broder, A. Wadhams, K. Kaweck, J. Hozier, M. Moore, D. Clive, A. Burrell
Florida Institute of Technology, Melbourne, FL, U.S. Environmental Protection Agency and Burroughs Wellcome, Research Triangle Park, NC, and IBM, San Jose, CA

20
THE MUTAGENIC EFFECT OF SEVEN COMPOUNDS AT THREE GENETIC LOCI IN L5178Y TK+/- MOUSE LYMPHOMA CELLS
A.M. Beck, C. Hay, W.J. Caspary
Microbiological Associates, Incorporated and National Institute of Environmental Health Sciences, Research Triangle Park, NC

21
COMPARISON OF F_{10} AND RPMI USING L5178Y/TK+/- 3.7.2C MOUSE LYMPHOMA CELLS
R. Krehl, G. McGee, D. Clive
Burroughs Wellcome Company, Research Triangle Park, NC

22
STUDIES WITH METHOTREXATE AT *TK* AND *HGPRT* LOCI IN L5178Y MOUSE LYMPHOMA CELLS
P.A. Poorman, N.J. Turner, R. Krehl, D. Clive
Burroughs Wellcome Company, Research Triangle Park, NC

23
SODIUM PYRUVATE INHIBITION OF H_2O_2-INDUCED MUTATION IN MAMMALIAN CELLS
D. Spencer Dalton, W.J. Caspary
National Institute of Environmental Health Sciences/National Institute of Health, Research Triangle Park, NC

2501644845

06 NOV 90 48

24
MUTAGENIC ACTIVITY AT THE TK LOCUS: RODENT VS. HUMAN CELLS
W. Caspary, R. Langenbach, B. Penman, C. Crespi, A. Mitchell, B. Myhr
National Institute of Health, Research Triangle Park, NC, Gentest, Woburn, MA, Genesys Research, Mountainview, CA, and Hazleton Biotechnologies, Kensington, MD

25
CHROMOSOME STUDIES OF CELLS FROM SPONTANEOUS AND CHEMICAL MUTAGEN-INDUCED SMALL (σ) AND LARGE (λ) UNSELECTED AND TRIFLUOROTHYMIDINE-RESISTANT (TFT) L5178Y MOUSE LYMPHOMA CELL COLONIES
W.F. Blazak, C.J. Rudd, F. Lee, K. Pardo, W.J. Caspary
SRI International, Menlo Park, CA and National Institute of Environmental Health Sciences, Research Triangle Park, NC

26
MUTAGENICITY, SISTER CHROMATID EXCHANGE, AND ENDOREDUPLICATION STUDIES ON HYDROXYLAMINE HCL
J.W. Harbell, W.H. McKenzie, L.W. Wilcher, D.W. Korte Jr.
Letterman Army Institute of Research, San Francisco, CA, and North Carolina State University, Raleigh, NC

27
MUTAGENICITY OF SULFIDES AND POLYSULFIDES IN THE MOUSE LYMPHOMA ASSAY
T.F. Dooley, G.R. Blackburn, C.A. Schreiner, C.R. Mackerer
Mobil Environmental & Health Science Laboratory, Princeton, NJ

28
CORRELATION OF DNA-PROTEIN CROSSLINKS (DPC) WITH CYTOTOXICITY AND MUTAGENICITY IN FORMALDEHYDE (HCHO) TREATED HUMAN LYMPHOBLASTS
E. Bermudez, T.R. Chan
Chemical Industry Institute of Toxicology, Research Triangle Park, NC

29
CELL KINETICS AND SISTER CHROMATID EXCHANGE FREQUENCIES OF HUMAN LYMPHOCYTES GROWN IN A MIXTURE OF HANK'S BALANCED SALT SOLUTION AND AUTOLOGOUS PLASMA
M.E. Gonsebatt, O.M. Murchinick
Departamento de Genetica, Instituto Nacional de la Nutricion, Mexico City, Mexico

30
DETECTION OF GENOTOXICITY OF GRAIN FUMIGANTS IN HUMAN LYMPHOCYTES
V.F. Garry, R. Nelson, M. Harkins
University of Minnesota, Minneapolis, MN

31
MODULATION OF RADIATION-INDUCED CHROMOSOME ABERRATIONS BY DMSO-AN OH RADICAL SCAVENGER
L.G. Littlefield, E. Joiner, E.L. Frome, J.P. Colyer
Oak Ridge Associated Universities and Oak Ridge National Laboratory, Oak Ridge, TN

2501644846

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 48

32
N-METHYL-N-NITROSOUREA-INDUCED CELL KILLING AND MUTAGENESIS IN HUMAN FETAL CELL CULTURES CONTAINING DIFFERENT LEVELS OF O⁶-METHYLGUANINE-DNA METHYLTRANSFERASE ACTIVITY
R. Mirzayans, M.V. Middlestadt, M.C. Paterson (Introd. by R.D. Mehlis)
Cross Cancer Institute, Edmonton, Alberta, Canada

33
EVALUATION OF TWO *IN VITRO* ASSAYS TO SCREEN FOR POTENTIAL TERATOGENS
V.E. Steel, R.R. Murrmsey, J.C. Lamb IV, B.P. Williamson, D.G. Rocha, D.D. Murphy, E.L. Elmore
Northrop Services, Incorporated and National Institute of Environmental Health Sciences, Research Triangle Park, NC

34
COMPARATIVE EVALUATION OF UNSCHEDULED DNA SYNTHESIS (UDS) IN HEPATOCYTES ISOLATED FROM VARIOUS MOUSE STRAINS
G. Milliner, J.G. Shaddock, R.D. Harbison, D.A. Casciano
National Center for Toxicological Research, Jefferson, AR and The University of Arkansas for Medical Sciences, Little Rock, AR

35
AN EVALUATION OF CYTOTOXICITY AND GENOTOXICITY OF BENZOYL PEROXIDE
S.H.H. Swierenga, S.H. Hasnain, F. Lee
Drug Toxicology Division, Health Protection Branch, Ottawa, Ontario, Canada

COMPLEX MIXTURES

36
A COMPARISON OF THE MUTAGEN CONTENT OF FRIED CHICKEN AND FRIED BEEF
N.H. Shen, M.G. Kaiser, F.T. Hatch, J.S. Felton
Lawrence Livermore National Laboratory, Livermore, CA

37
DEVELOPMENT AND EVALUATION OF A PROTOCOL TO PREPARE DRINKING WATER SAMPLES FOR MUTAGENICITY TESTING
Y.Y. Wang, C.P. Hessel, K. Chang, D.A. Hollander, P.J. Marsden, L.R. Williams
California State Department of Health Services, Berkeley, CA, S-Cubed, La Jolla, CA, and U.S. Environmental Protection Agency, EMSL, Las Vegas, NV

38
REACTION OF CHLORINE DIOXIDE WITH AMINO ACIDS AND PEPTIDES: KINETICS AND MUTAGENICITY STUDIES
C.J. Wei, H. Tan, W.B. Wheeler
University of Florida, Gainesville, FL

2501644847

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

39
MUTAGENICITY OF INDOOR AIR IN A RESIDENTIAL FIELD STUDY
J. Lewtas, S. Goto, K. Williams, J. Chapell, N. Wilson
U.S. Environmental Protection Agency, Research Triangle Park, N.C. and The Institute of Public Health, Tokyo, Japan.

40
VALIDATION STUDIES OF A MICROSUSPENSION MODIFICATION OF THE AMES BACTERIAL MUTAGENESIS ASSAY AND ITS APPLICATION TO CIGARETTE SMOKE CONDENSATE
D.A. Lee, C.K. Lee, D.J. Doolittle
R.J. Reynolds Tobacco Company, Winston-Salem, NC

41
THE EFFECTS OF TREATMENT CONDITIONS ON SISTER CHROMATID EXCHANGE INDUCTION BY CIGARETTE SMOKE CONDENSATE
C.K. Lee, B.G. Brown, L.A. Reed, G.D. Lowe
R.J. Reynolds Tobacco Company, Winston-Salem, NC

42
S9 FROM RATS TREATED WITH CIGARETTE SMOKE CONDENSATE: MUTAGENIC RESPONSE OF B(a)P, QUERCETIN AND AFB$_1$ IN THE AMES ASSAY
M. Gomes, J. Ruff, A. Flores, T. Chaveca, J. Rotteo, M. Halpern
Faculty of Medical Sciences, Lisbon, Portugal

43
DIESEL EXHAUST MUTAGENICITY DURING MINING
G. Lofroth, G. Lazaridis, F. Nordstrom
Nordic School of Public Health, Gothenburg, University of Stockholm and University of Luleå, Luleå, Sweden

44
MUTAGENIC POTENCY OF BINARY MIXTURES OF POLYCYCLIC AROMATIC AND NITROAROMATIC HYDROCARBONS
T. Kelly, K.C. Donnelly, A. Akgerman, T.R. Irvin
Texas A&M University, College Station, TX

45
TESTING OF PETROLEUM MIDDLE DISTILLATES IN A MODIFIED AMES ASSAY
G.R. Blackburn, R.A. Deitch, C.A. Schreiner, C.R. Mackerer
Mobil Environmental & Health Science Laboratory, Princeton, NJ

46
EXTRACTION AND METABOLIC ACTIVATION PARAMETERS FOR PETROLEUM FRACTIONS IN A MODIFIED AMES ASSAY
R.A. Deitch, G.R. Blackburn, C.A. Schreiner, C.R. Mackerer
Mobil Environmental & Health Science Laboratory, Princeton, NJ

47
ACTIVATION CONDITIONS FOR DETECTING THE MUTAGENICITY OF AN EXTRACT OF A CRUDE PETROLEUM OIL IN MOUSE LYMPHOMA CELLS
T.R. Barthelbe, R.C. Nerdone, R.W. Nesmith
Pharmakon Research International, Incorporated, Waverly, PA

2501644848

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

48
THE GENOTOXIC AND CARCINOGENIC POTENTIAL OF ENGINE OILS AND HIGHLY REFINED LUBRICATING OILS
R.J. McKee, R.T. Frayude (Introd. by S.C. Lewis)
Exxon Biomedical Sciences Incorporated, East Millstone, NJ

49
EVALUATION OF *IN VIVO* AND *IN VITRO* SHORT-TERM TESTS FOR SCREENING HAZARDOUS WASTES
D.M. DeMarini, J.P. Iamon, V.S. Houk, S. Warren, S. Sandhu, G. Acosta, K. Brock, M.M. Moore, T. Pasky, R. Williams
U.S. Environmental Protection Agency and Environmental Health Research and Testing, Research Triangle Park, NC

50
USE OF THE MICROSCREEN PHAGE INDUCTION ASSAY TO ASSESS THE GENOTOXICITY OF FOURTEEN UNFRACTIONATED HAZARDOUS WASTES
V.S. Houk, D.M. DeMarini
U.S. Environmental Protection Agency, Research Triangle Park, NC

TUMOR PROMOTION

51
A TPA RESISTANT SUBPOPULATION OF HUMAN BRONCHIAL EPITHELIAL CELLS HAS ENHANCED GROWTH POTENTIAL
M.I. Sanchez, C.J. Borecki, J.D. Ilgenfritz, J.W. Holleman
Chemical Industry Institute of Toxicology, Research Triangle Park, NC and Duke University Medical Center, Durham, NC

52
EXAMINATION OF THE TUMOR PROMOTING CAPABILITY OF *STERCULIA FOETIDA* OILS IN MALE F-344 RAT PANCREAS
E.T. Stalmerg, D.K. Spah, N. Palowski, J.C. Mirsalis
SRI International, Menlo Park, CA and Oregon State University, Corvallis, OR

CELL TRANSFORMATION

53
INDUCTION OF MORPHOLOGICAL TRANSFORMATION IN C3H/10T1/2 CL8 MOUSE EMBRYO FIBROBLASTS BY CARCINOGENIC NICKEL COMPOUNDS
T. Miura, J.R. Laddiph
University of Southern California School of Medicine, Los Angeles, CA

54
ACRYLONITRILE AND ACRYLAMIDE FAIL TO TRANSFORM C3H/10T1/2 CELLS
D.J. Abernathy, C.J. Borecki
Chemical Industry Institute of Toxicology, Research Triangle Park, NC

55
DEVELOPMENT OF AN EXPERIMENTAL SYSTEM TO EVALUATE THE ACTIVATION OF ONCOGENES BY CHEMICALS
K.P. H.C.A. Myers, A.M. Kirk, C.W. Johnson
Monsanto Company, St. Louis, MO

2501644849

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90

THURSDAY, 1:30 PM
Ballroom 5

DNA REPAIR
J.L. Epler and K.K. Richardson, Presiding

1:30

RADIATION EFFECT ON THE *DROSOPHILA MELANOGASTER* GENETIC MATERIAL
J. Guzman R., C. Cortinas de Nava, O. Olvera R., M.E. de la Rosa D., Departamento de Radiobiologia, I.N.I.N., Salazar, Estado de Mexico, and Instituto de Investigaciones Biomedicas, Mexico City, Mexico

1:45

DNA BASE CHANGES INDUCED FOLLOWING *IN VIVO* EXPOSURE OF UNADAPTED AND ADAPTED *E. COLI* TO N-METHYL-N'-NITRO-N-NITROSOGUANIDINE
K.K. Richardson, R.M. Crosby, T.R. Skopek, Chemical Industry Institute of Toxicology, Research Triangle Park, NC

2:00

FORWARD AND REVERSE MUTATION AT THE *HPRT* LOCUS IS DECREASED IN CHINESE HAMSTER CELLS EXPRESSING *E. COLI* ALKYLTRANSFERASE
M. Fox, J. Brennand, G.P. Margison, Paterson Institute for Cancer Research, Christie Hospital, Manchester, and Imperial Chemical Industries, Cheshire, UK

2:15

MOLECULAR ANALYSIS OF GENETIC ALTERATION AT THE *APRT* LOCUS IN DNA REPAIR-PROFICIENT OR DEFICIENT CHO CELLS
J.E. Schaerer, G.M. Adair, C. MacKinnon, R.A. Brotherman, F.A. Kimmelmann, The University of Texas System Cancer Center, Smithville, TX

THURSDAY, 1:30 PM
Ballroom 6

HUMAN POPULATION MONITORING II
W.L. Bigbee and J.A. Reidy, Presiding

1:30

SMOKING AND CHROMOSOME ABERRATIONS: EFFECTS OF CULTURE TIME AND CULTURE MEDIUM FOLATE
J.A. Reidy, A.T.L. Chen, J.L. Annest, T. Welty, Centers for Disease Control, Atlanta, GA

1:45

SMOKING AND CHROMOSOME ABERRATIONS: EFFECT OF INDIVIDUAL FOLATE LEVELS ON ABERRATIONS IN 96-HOUR, LOW FOLATE CULTURES
A.T.L. Chen, J.A. Reidy, J.L. Annest, T. Welty, Centers for Disease Control, Atlanta, GA

2:00

THE EFFECT OF LOW LEVEL STYRENE EXPOSURE IN BOAT BUILDERS ON SISTER CHROMATID EXCHANGE FREQUENCY
K.T. Kelsey, R. Lotz, D. Wright, J.R. Little, Harvard School of Public Health, Boston, MA and Mt. Sinai Medical School, New York, NY

2:15

SULFIASALAZINE CAUSES CHROMOSOME CHANGES IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE
J.M. Mackay, D.P. Fox, P.W. Brunt, G.M. Hawksworth, J.E. Brown, York University, Toronto, Ontario, Canada and University of Aberdeen, Scotland

2501644850

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 18

THURSDAY, 1:30 PM
Parlors 1-3

COMPLEX MIXTURES II
N.Y. Kado and S.J. Rinkus, Presiding

==========

1:30
MUTAGENICITY AND DNA DAMAGE IN CHINESE HAMSTER OVARY CELLS TREATED WITH COFFEE
S.J. Rinkus, S.J. Tyler, R.T. Taylor, Lawrence Livermore National Laboratory, Livermore, CA

1:45
NITROSATABLE PRECURSORS IN GRILLED FOODS
M. Nagao, K. Wakabayashi, M. Yano, T. Sugimura, National Cancer Center Research Institute, Tokyo, Japan

2:00
IDENTIFICATION AND MUTAGENICITY OF THE AMINO-IMIDAZO-QUINOXALINES IN FRIED BEEF
M.G. Knize, N.H. Shen, S.K. Healy, J.S. Felton, Lawrence Livermore National Laboratory, Livermore, CA

2:15
FORMATION OF THE FRIED GROUND BEEF MUTAGENS 2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE (IQ) AND 2-AMINO-1-METHYL-6-PHENYLIMIDAZO-[4,5-b]PYRIDINE (PhIP) FROM L-PHENYLALANINE (Phe), CREATININE (Cre) (OR CREATININE)
R.T. Taylor, E. Felix, M.G. Knize, J.S. Felton, Lawrence Livermore National Laboratory, Livermore, CA

THURSDAY, 1:30 PM
Parlors 7-9

MAMMALIAN CELLS *IN VIVO*
W.W. Au and M.T. Goldberg, Presiding

==========

1:30
CHROMOSOME DAMAGING EFFECTS OF ALKYLATED AND HALOGENATED BENZENES ON BONE MARROW OF MICE
E. Muhtashamipur, K. Norpoth, Institute of Hygiene and Occupational Medicine, University Medical Center, Essen, W. Germany

1:45
IDENTIFICATION OF BENZENE AS A POTENT ENVIRONMENTAL GENOTOXIC AGENT
W.W. Au, J.B. Ward, Jr., M.T. Muskin, B.L. Harper, V.M.S. Ramanujam, M.S. Legator, The University of Texas Medical Branch, Galveston, TX

2:00
PERSISTENCE OF SCE-INDUCING DNA DAMAGE IN LYMPHOCYTES OF MICE ADMINISTERED L-PAM
P.J. Gurde, M.K. Conner, J.H. Turner, University of Pittsburgh, Pittsburgh, PA

2:15
EFFECT OF CYSTEAMINE ON SCE INDUCTION BY GAMMA RAYS IN MURINE BONE MARROW CELLS *IN VIVO*
P. Morales-Ramírez, M.T. Mendoza Cruz, Instituto Nacional de Investigaciones Nucleares, Mexico City, Mexico

2501644851

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 89 tg

THURSDAY, 2:30 PM
Ballroom 5

DNA REPAIR
J.L. Epler and K.K. Richardson Presiding

2:30
COMPLEMENTATION OF DNA REPAIR DEFICIENCY IN MAMMALIAN CELLS BY THE TRANSFER OF A SINGLE HUMAN CHROMOSOME
R.S. Athwal, J. Bolly, L.H. Thompson, New Jersey Medical School, Newark, NJ and Lawrence Livermore National Laboratory, Livermore, CA

2:45
MOLECULAR CLONING OF A HUMAN REPAIR GENE RESPONSIBLE FOR REJOINING OF DNA DOUBLE STRAND BREAKS
D.J. Chen, P.A. Jeggo, M.A. Macinnes, R.J. Reynolds, O.F. Strahle, J.S. Tolmay, Los Alamos National Laboratory, Los Alamos, NM

3:00
A PHOTOBIOLOGICAL EVALUATION OF TANNING BEDS
C.L. Hix, A.A. Francis, W.L. Harrier, J.D. Regan, Tennessee Technological University, Cookeville, TN and Oak Ridge National Laboratory, Oak Ridge, TN

3:15
REPAIR OF DNA DAMAGED BY ACTIVATED METABOLITES OF AZABENZO(a)PYRENE IN HUMAN CELLS
J.L. Epler, J.D. Regan, Oak Ridge National Laboratory, Oak Ridge, TN

THURSDAY, 2:30 PM
Ballroom 6

HUMAN POPULATION MONITORING II
W.L. Bigbee and J.A. Reidy, Presiding

2:30
6-THIOGUANINE RESISTANT T-LYMPHOCYTE DETERMINATION AS A POSSIBLE INDICATOR OF RADIATION EXPOSURE
P. Ostrosky Wegman, R. Montero, M. Gomez, C. Cortinas de Nava, Instituto de Investigaciones Biomedicas, Mexico City, Mexico

2:45
HPRT- MUTANT FREQUENCY AMONG RADIOTHERAPY TECHNICIANS IS RELATED TO LEVELS OF RECENTLY RECEIVED DOSE OF IONIZING RADIATION
A.M. Seifert, W.L. Bradley, J. Sawka, R. Meyning, Universite du Quebec a Montreal and Institut du Cancer de Montreal, Montreal, Quebec, Canada

3:00
MUTANT T LYMPHOCYTES IN HUMAN CORD BLOOD
M.J. McGinniss, R.J. Albertini, University of Vermont, Burlington, VT

3:15
EVIDENCE FOR ELEVATED SOMATIC CELL MUTATIONS AT THE GLYCOPHORIN A LOCUS IN A-BOMB SURVIVORS
R.G. Langlois, W.L. Bigbee, M. Akiyama, R.H. Jensen, Lawrence Livermore National Laboratory, Livermore, CA and Radiation Effects Research Foundation, Hiroshima, Japan

3:30 - 4:00 COFFEE BREAK

2501644852

06 NOV 90 18

THURSDAY, 2:30 PM
Parlors 1-3

COMPLEX MIXTURES II
N.Y. Kado and S.J. Rinkus, Presiding

2:30
MUTAGENIC METABOLITES IN URINE AND FECES OF RATS FED WITH 2-AMINO-1,8-DIMETHYL-IMIDAZO[4,5-f]QUINOXALINE (MeIQx), A CARCINOGENIC MUTAGEN PRESENT IN COOKED MEAT
H. Hayton, H. Kasai, S. Yokoyama, T. Miyazawa, Z. Yamaizumi, S. Sato, S. Nishimura, S. Arimoto, T. Hayatsu, Y. Ohara, Okayama University, Okayama, National Cancer Center, and University of Tokyo, Tokyo, Japan

2:45
COMPARATIVE GENOTOXICITY OF MIDSTREAM AND MAINSTREAM CIGARETTE SMOKE
L.G. Morelli, J.M. Simmons, C.H. Myers, J.J. Hughes, J.D. Claxton, Research Triangle Institute, and U.S. Environmental Protection Agency, Research Triangle Park, NC

3:00
GENOTOXIC EMISSION FACTORS FOR MIDSTREAM CIGARETTE SMOKE COMPONENTS
G. Loftus, R. Burton, G. Goldstein, L. Forehand, K. Hammond, J. Mumford, R. Sells, J. Lewtas (Intrd. by W. Stenchel), Nordic School of Public Health, Gothenburg, Sweden, U.S. EPA AND KIRY, RTP, NC and University of Massachusetts, Worcester, MA

3:15
MUTAGENICITY OF PARTICULATE MATTER COLLECTED ON PERSONAL LOW VOLUME SAMPLING FILTERS FROM INDIVIDUALS EXPOSED TO ENVIRONMENTAL TOBACCO SMOKE (PASSIVE CIGARETTE SMOKE)
N.Y. Kado, S.J. Tsuda, S.M. McCarthy, M.B. Schecter, S. Wanke, S.K. Hammond, Air Resources Board, Sacramento, CA, University of California, Davis, CA, and University of Massachusetts, Worcester, MA

THURSDAY, 2:30 PM
Parlors 7-9

MAMMALIAN CELLS *IN VIVO*
W.W. Au and M.T. Goldberg, Presiding

2:30
THE RELATIONSHIP BETWEEN CHEMICALLY INDUCED HYPERPLASIA AND THE INDUCTION OF NEOPLASIA IN THE RAT KIDNEY
D.J. Lamb, T.L. Goldsworthy, T. Smith-Oliver, J.A. Popp, H.E. Butterworth, Chemical Industry Institute of Toxicology, Research Triangle Park, NC

2:45
COMPARATIVE TUMORIGENICITY AND DEOXYRIBONUCLEIC ACID CONTENT OF TWO PHENOTYPICALLY VARIANT CELL TYPES DERIVED FROM MOUSE ADENOCARCINOMA
M.A. Bempong, K.I. Taylor, Norfolk State University, Norfolk, VA

3:00
THE NUCLEAR ABERRATION ASSAY APPLIED TO HAIR FOLLICLE CELLS AND URINARY BLADDER EPITHELIUM
M.T. Goldberg, A.M. Vadelaga, V.J. Mamprey, University of Guelph, Guelph, Ontario, Canada

3:15
THE NUCLEAR ABERRATION ASSAY REVISITED
M.J. Wargovich, M.T. Goldberg, University of Texas System Cancer Center, Houston, TX and University of Guelph, Ontario, Canada

3:30 - 4:00 COFFEE BREAK

2501644853

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

OX 2 bv 90. 18

THURSDAY, 4:00 pm - 6:00 pm **SYMPOSIUM**

NEW APPROACHES IN ENVIRONMENTAL MUTAGENESIS

Ballroom 5 **Raymond R. Tice, Presiding**

Sponsor: R.J.R. Nabisco

This symposium will introduce and summarize exciting new methodologies for the detection and analysis of genotoxic damage in eukaryotic cells. The novel methods presented will utilize *in vitro* and *in vivo* systems and range from single cell approaches for detecting DNA damage, to a sensitive and reliable technique for the identification of agents capable of inducing aneuploidy.

4:00 FLUORESCENCE HYBRIDIZATION TECHNIQUES FOR THE ANALYSIS OF GENETIC DAMAGE
Daniel Pinkel
Lawrence Livermore National Laboratory

4:30 ANALYSIS FOR GENOTOXIC EFFECTS USING RODENT-HUMAN MONOCHROMOSOMAL HYBRIDS
Raghbir Athwal
New Jersey Medical School

5:00 A SIMPLE TECHNIQUE FOR QUANTITATION OF LOW LEVELS OF DNA DAMAGE IN SINGLE CELLS
Narendra Singh
National Institute on Aging

5:30 SELECTIVE ACTIVATION OF ENDOGENOUS ECOTROPIC RETROVIRUSES IN THE MOUSE
Richard Irons
Chemical Industry Institute of Toxicology

6:30 pm - 9:30 pm **AWARDS AND RECEPTION**

Ballroom 5

Sponsors: Microbiological Associates, Inc.
Hazleton Laboratories America, Inc.

2501644854

06 NOV 90 tg

A Multidisciplinary Approach to Toxicology

The Research Triangle Institute (RTI) offers unique capabilities for a multidisciplinary approach in evaluating the toxic potential of pure compounds and complex environmental mixtures. This includes both method development and validation as well as chemical sample collection and analysis. The research staff of over 1,200 employees can assist your organization with a research approach and a cost estimate. If RTI can be of service, call the number listed below.

RTI: Capabilities

- Methods Development and Validation
- Collection of Samples
- Chemical Extraction
- Chemical Analysis
- Bioassay: Genetic Toxicology
  - In Vivo Mutagenesis
  - Teratology
  - Reproductive Effects
  - Acute Toxicology
  - Neurobehavioral Toxicology
  - Metabolism Studies
  - Endocrine Services
    - Quantitation of Proteins/Steroids (by EIA/RIA)
    - Design of Endocrine Experiments
    - Receptor Binding Assays
- Statistical Analysis
- Risk Assessment

RTI: Experience

- Contracts and Grants from Government, State and Industrial Clients
- 64 Million Dollars in Business (1989)
- 28 Years Experience
- Services Individually Designed to the Client's Specifications
- Independent Non Profit Research Organization Located in the Research Triangle Park, North Carolina

Questions: For an immediate reply contact:

Dr. Frederick J. de Serres, Director
Center for Life Sciences and Toxicology
Research Triangle Institute
Post Office Box 12194
Research Triangle Park, North Carolina 27709
(919) 541-6516

RTI

2501644855

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 48

10:30 GERM CELL MUTATION IN MICE: STANDARDS FOR PROTECTING THE HUMAN GENOME
Udo Ehling
Gesellschaft fur Strahlen- und Umweltforschung, FRG

11:00 GERM CELL MUTATION IN HUMAN BEINGS: CURRENT RESULTS FROM JAPAN
James Neel
University of Michigan

11:30 OTHER APPROACHES: SENTINEL PHENOTYPES AND OFFSPRING OF CANCER PATIENTS
John Mulvihill
National Cancer Institute

12:00 pm ANNUAL BUSINESS MEETING

Ballroom 5

1:30 pm - 2:30 pm SPECIAL LECTURE

INTERACTION OF CANCER RESEARCH AND ENVIRONMENTAL MUTAGEN STUDIES - PAST, PRESENT AND FUTURE

TAKASHI SUGIMURA
PRESIDENT
NATIONAL CANCER CENTER, JAPAN

Ballroom 5

Sponsor: Pharmakon Research International, Inc.

2501644856

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 Nov 90 1/4

FRIDAY, 10 APRIL 1987
Ballroom 4
2:30 - 4:00 PM

POSTER SESSION II

Posters are to be set up by 9:00 am of their scheduled day, and to remain up for viewing until 5:00 pm. It is required that an author be present during the scheduled poster session.

Coffee will be available at the beginning of the Poster Session.

RISK ASSESSMENT

1
GENETIC TOXICOLOGY: A CRITICAL APPRAISAL
D. Clive
Burroughs Wellcome Company, Research Triangle Park, NC

2
SIGNIFICANCE OF NON-GENOTOXICITY IN THE PREDICTION OF CARCINOGENIC RISK TO HUMANS
S.F. Purvis, A.H. Shedroff, D. Van der Sluis, F.K. Ramsey, H.S. Rosenkranz
Case Western Reserve University School of Medicine, Cleveland, OH

3
GENOTOXICITY ASSESSMENT OF TRIMETREXATE: A NEW ANTICANCER DRUG
M.L. Krupka, J.C. Theiss, G.D. Stoner, F.A. de la Iglesia
Warner Lambert/Parke-Davis Pharmaceutical Research, Ann Arbor, MI and Medical College of Ohio, Toledo, OH

4
QUANTITATIVE COMPARATIVE MUTAGENICITY TESTING OF A DRUG CANDIDATE: COUPLING OF KNOWLEDGE OF MECHANISMS OF TOXIFICATION PROVIDES A POWERFUL RISK ASSESSMENT
G.S. Aaron, T. Clough, P.F. Hartisch, J. Mazurek, J. Mayo, L. Stankowski, D. Swenson, R. Truax, R. Valencia, S.K. Wier, D. Zimmer
The Upjohn Company, Kalamazoo, MI, Pharmakon Research International, Waverly, PA, and University of Wisconsin, Madison, WI

5
INFLUENCE OF THE VARIABLE EXPRESSION OF THE A^{y} MUTATION ON THE PROPORTION OF (YS x VY) F1 HYBRID MICE SUSCEPTIBLE TO LINDANE ASSOCIATED TUMOR FORMATION
G.L. Wolff, R.E. Morrissey
National Center for Toxicological Research, Food and Drug Administration, Department of Health and Human Services, Jefferson, AR, and Pathology Associates Incorporated, Damsville, MD

6
MUTAGENICITY ACTIVITY OF FISH MUSCLE EXTRACTS
R.D. Bitner, C.E. Mohr, O.C. Pancorbo
East Tennessee State University, Johnson City, TN, and University of Georgia, Athens, GA

2501644857

06 NOV 90 Y.Y

DNA REPAIR

7
CLONING OF A HUMAN GENE THAT RESTORES NORMAL SCE AND STRAND-BREAK REPAIR TO CHO MUTANT LINE EM9
K.W. Brookman, L.H. Thompson, C.C. Collins, S.A. Stewart, J.J. Nisler, A.V. Carrano
Lawrence Livermore National Laboratory, Livermore, CA

8
CLONING AND CHARACTERIZATION OF A HUMAN GENE WHICH COMPLEMENTS THE NUCLEOTIDE EXCISION REPAIR DEFICIENT CHO CELL LINE UV5
C.A. Weber, E.F. Salazar, S.A. Stewart, L.H. Thompson
Lawrence Livermore National Laboratory, Livermore CA

9
ISOLATION OF HUMAN DNA SEQUENCES ASSOCIATED WITH A DNA EXCISION REPAIR GENE
M.A. Maciaszek, R. Okinaka, D.J. Chen, B.J. Reynolds, J.G. Tainer, G.F. Strniste
Los Alamos National Laboratory, Los Alamos, NM

10
RESISTANCE TO THE TOXIC EFFECTS OF 5-BROMO-2'-DEOXYURIDINE AND WHITE-LIGHT IRRADIATION IN A SYRIAN HAMSTER CELL LINE
E.R. Kaufman
University of Illinois College of Medicine, Chicago, IL

11
TEMPERATURE AND SPECTRAL STUDIES ON A UV-INDUCED PHOTOSENSITIVE LESION IN THE DNA OF HUMAN CELLS
A.A. Francis, J. D. Regan
Oak Ridge National Laboratory, Oak Ridge, TN

12
ANALYSIS OF THREE REPAIR PATHWAYS ASSOCIATED WITH MNNG SUSCEPTABILITY IN LEUKOCYTES FROM ALZHEIMER'S DISEASE PATIENTS
J.D. Bartlett, W.G. Bradley, S.H. Robison
University of Vermont, Burlington, VT

13
EVALUATION OF ACRYLAMIDE IN RODENT HEPATOCYTE DNA/REPAIR ASSAYS
T.R. Barfknecht, D.J. Mecca, R.W. Naismith
Pharmakon Research International, Incorporated, Waverly, PA

14
EVALUATION OF FOUR SCORING METHODS AND COMMPARISON OF RAT STRAIN DIFFERENCES IN THE *IN VITRO* UNSCHEDULED DNA SYNTHESIS (UDS) ASSAY
P.R. Herbach, C.R. Grandgenett, S.K. Wiser, A.L. Smith, C.S. Aaron
The Upjohn Company, Kalamazoo, MI

2501644858

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 tg

15
THE ROLE OF DNA EXCISION REPAIR IN THE MODULATION OF MUTATIONS INDUCED IN CHINESE HAMSTER CELLS BY 2-AMINOFLUORENE DERIVATIVES
R.T. Okinaka, T.W. Weakly, G.P. Strauss
Los Alamos National Laboratory, Los Alamos, NM

PROKARYOTIC STUDIES

16
FORMALDEHYDE INDUCES DNA BASE CHANGES IN *E. COLI* AND RESTRICTION FRAGMENT PATTERN ALTERATIONS IN HUMAN LYMPHOBLASTS
R.M. Crosby, K.K. Richardson, T.R. Craft, T.R. Skopek, K.B. Benforado, H.L. Liber
Chemical Industry Institute of Toxicology, Research Triangle Park, NC, and Harvard School of Public Health, Boston, MA

17
COLONY PROBING OF *SALMONELLA TYPHIMURIUM HISD3052* REVERTANTS
T.A. Cebula, W.E. Payne, M.W. Truckses, W.E. Hill
Food and Drug Administration, Washington, DC

18
THE MECHANISM OF AFLATOXIN B1 DIRECT-ACTING MUTAGENICITY
H.R. Olsen, N.Y. Kado, D.F.H. Hsieh
University of California, Davis, CA

19
INDUCTION OF GENETIC DUPLICATIONS IN BACTERIA BY β-PROPIOLACTONE AND STRYCHNINE
G.R. Hoffmann, K.M. Sprague, C.C. Van Haight, J.A. Wrobel, D.H. Wroblewski
College of the Holy Cross, Worcester, MA

20
MUTATIONAL FINGERPRINT ANALYSIS OF CHEMICAL INTERMEDIATES GENERATED BY DMN, DEN, AND RELATED COMPOUNDS
J.G. Farrelly, J.A. Gordon, S.A. Cook, P.D. Mullin, M.L. Stewart, R.K. Elespuru
NCI-Frederick Cancer Research Facility, Frederick, MD

21
A GENOTOXIC ANALYSIS OF COBALTOUS ACETATE UTILIZING THE *SALMONELLA* MUTAGENICITY ASSAY AND THE MOUSE MICRONUCLEUS TEST
L.J. Turcotte, M. Bauzon, L. Kocur
Wilkes College, Wilkes Barre, PA

22
MUTAGENICITY STUDY OF SULFUR MUSTARD IN THE *SALMONELLA* HISTIDINE REVERSION TEST
D.L. Stewart (Intern by R.F. Jones)
Pacific Northwest Laboratories, Richland, WA

2501644859

23
MUTAGENICITY STUDIES OF BENZOYL PEROXIDE IN BACTERIA
T.J. Matula, R.H. Downie, N. Barrett
Health and Welfare Canada, Ottawa, Ontario, Canada

24
MUTAGENICITY OF FINE SAND COLLECTED FROM RIYADH
M.A. Hussain, M.Y. Abou-Enein, A.A.R. Al-Dahan
King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia

25
MUTAGENIC ACTION OF CROWN ETHERS
P. Arranz, K. Paabell, S. Garcia, University of Texas, El Paso, TX

26
MUTAGENICITY OF VOLATILE ORGANIC COMPOUNDS COMMONLY FOUND AS CONTAMINANTS IN POTABLE WATER SUPPLIES
T.D. Calandra, J.E. Caruso, S.J. Shahied
New Jersey State Department of Health, Trenton, NJ

27
MUTAGENICITY OF NITROFURANS IN *SALMONELLA TYPHIMURIUM* TA98, TA98NR, AND TA98/1,8-DNP
Y.-C. Ni, R.H. Heflich, E.F. Kaldhar, P.P. Fu
National Center for Toxicological Research, Jefferson, AR

28
MUTAGENICITY OF 31 ORGANIC COMPOUNDS IN A MODIFIED PREINCUBATION AMES ASSAY WITH *SALMONELLA TYPHIMURIUM* STRAINS TA100 AND TA102
T.J. Hughes, D.S. Simmons, L.G. Monteith, L.E. Myers, L.D. Claxton
Research Triangle Institute and U.S. Environmental Protection Agency, Research Triangle Park, NC

29
INHIBITORY EFFECT OF CHLOROPHYLLIN ON AFLATOXIN B_1 INDUCED MUTATION IN *SALMONELLA TYPHIMURIUM*
W.T. Wong, J. Stewart, H.E. Brockman, T. Ong
National Institute for Occupational Safety and Health, Morgantown, WV and Illinois State University, Normal, IL

30
MUTAGENICITY OF CrIII AND CrVI COMPOUNDS IN THE PRESENCE OF MANNITOL, DITHIOTHREITOL AND ANAEROBIOSIS
S.J. Rogers, D.A. Pegram, E. Zeiger
Montana State University, Bozeman, MT and National Institute of Environmental Health Sciences, Research Triangle Park, NC

31
THE RELATIONSHIP BETWEEN COVALENT DNA BINDING AND REVERTANT YIELD IN THE *SALMONELLA* MUTAGENICITY (AMES) ASSAY - IMPLICATIONS FOR ASSAY SPECIFICITY
R.H. Dashwood, Oregon State University, Corvallis, OR

2501644860

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

32
PRELIMINARY EVALUATION OF TREATMENT AND SELECTION CONDITIONS WHICH EFFECT EXPRESSION OF ANTHRACYCLINE MUTAGENICITY IN *SALMONELLA TYPHIMURIUM*
H.E. Thomas, University of Kentucky, Lexington, KY

33
INCORPORATION OF TA97a INTO A STANDARD AMES TEST PROTOCOL
C.E. Piper, C.D. Kazdas, G.D. Searle & Company, Skokie, IL

34
DYE TECHNIQUE DIFFERENTIATES TEST MATERIAL PRECIPITATE FROM *SALMONELLA TYPHIMURIUM* COLONIES
J.H. Carver, M.L. Machado, T.E. Lawler, S. Haworth
Chevron Environmental Health Center, Incorporated, Richmond, CA and Microbiological Associates, Incorporated, Bethesda, MD

35
PROTOCOLS FOR THE SOS/UMU CHROMOTEST
C. Barber, C. Smith, W.S. Barbera, Clarion University of Pennsylvania, Clarion, PA

CYTOGENETICS

36
DEVELOPMENT OF A MICRONUCLEUS ASSAY TO SCREEN FOR CLASTOGENICITY IN L5178Y MOUSE LYMPHOMA CELLS
C.L. Dodd, K.H. Brock, M.M. Moore, Environmental Health Research and Testing and U.S. Environmental Protection Agency, Research Triangle Park, NC

37
EVALUATION OF A SIMPLIFIED PROTOCOL FOR THE MOUSE BONE MARROW MICRONUCLEUS ASSAY
M. Garriott, C. Piper, A. Kokkino, G.D. Searle & Company, Skokie, IL

38
GENDER AND AGE DIFFERENCES IN THE MICRONUCLEUS TEST WITH BENZENE AND CYCLOPHOSPHAMIDE
E.L. Harper, M.S. Legator
The University of Texas Medical Branch, Galveston, TX

39
AN ANALYSIS OF THE FREQUENCY AND DISTRIBUTION OF MICRONUCLEI IN PERIPHERAL BLOOD ERYTHROCYTES OF CONTROL AND BENZENE EXPOSED MICE
C.A. Luke, R.E. Tice, Brookhaven National Laboratory, Upton, NY

40
COMPARATIVE SENSITIVITY OF *PEROMYSCUS LEUCOPUS* AND *MUS MUSCULUS* TO BENZENE INDUCED BONE MARROW DAMAGE
R. Boucher, C.A. Luke, B.G. Ormiston, D.E. Paquette, R.R. Tice, (Introd. by C. Shellabarger), Brookhaven National Laboratory, Upton, NY

2501644861

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

41
AN ANALYSIS OF THE TIME-DEPENDENT INDUCTION OF CHROMOSOMAL ABERRATIONS (CA) AND SISTER CHROMATID EXCHANGES (SCE) IN MOUSE BONE MARROW CELLS *IN VIVO*
D.E. Pegoletto, C.A. Luke, R.R. Tice, Brookhaven National Laboratory, Upton, NY

42
PRELIMINARY COMPARISON OF THREE CYTOGENETIC ASSAYS FOR GENOTOXICITY IN MOUSE BONE MARROW CELLS
K.W. Lewis, C.J. Holbrook, S.L. Liakos, M.R. Roberts (Introd. by A.F. McFee)
Oak Ridge Associated Universities, Oak Ridge, TN

43
A COMPARISON OF THE FREQUENCIES OF CHROMOSOME BREAKAGE IN MOUSE AND HUMAN PERIPHERAL BLOOD LYMPHOCYTES (PBLs) FOLLOWING GAMMA IRRADIATION
A.D. Kligerman, G.L. Erexson, E. Westbrook-Collins, J.W. Allen, E.C. Halperin, G. Honore
Environmental Health Research and Testing, and U.S. Environmental Protection Agency, Research Triangle Park, NC, and Duke University Medical Center, Durham, NC

44
A COMPARISON OF THE FREQUENCIES OF CHROMOSOMAL ABERRATIONS AND MICRONUCLEI IN MOUSE PERIPHERAL BLOOD LYMPHOCYTES EXPOSED TO GAMMA IRRADIATION *IN VITRO*
G.L. Erexson, A.D. Kligerman, J.W. Allen, E.C. Halperin, G. Honore
Environmental Health Research and Testing, and U.S. Environmental Protection Agency, Research Triangle Park, Duke University Medical Center, Durham, NC

45
THE EFFECT OF HYDROXYL RADICAL SCAVENGERS ON X-RAY INDUCED DNA DAMAGE IN NORMAL AND DOWN SYNDROME (DS) LYMPHOCYTES
R.A. MacLaren, W.W. Au, V.M.S. Ramabujam, M.S. Legator
The University of Texas Medical Branch, Galveston, TX

46
TOXICITY ASSESSMENT AND *IN VITRO* CHROMOSOME ABERRATION TESTS
M.J. Armstrong, S.M. Galloway
Merck Institute for Therapeutic Research, West Point, PA

47
A COMPARISON OF CYTOTOXICITY INDICATORS FOR *IN VITRO* CYTOGENETICS
D. Newman, D.D. Sedor, R.F. Preston, J.W. Oldham
Merrell Pharmaceutical, Spring House, PA

48
MUTAGENIC ACTION OF SODIUM AZIDE IN MAMMALIAN CELLS
P. Arenaz, University of Texas, El Paso, TX

2501644862

06 NOV 80 - 78

49
GENOTOXICITY STUDIES OF 1,1,1- AND 1,1,1-TRICHLOROACETONES (TCA)
W.F. Blazak, J.R. Meier, B.E. Stewart, D.C. Blackman, J.T. Deahl
SRI International, Menlo Park, CA and U.S. Environmental Protection Agency, Cincinnati, OH

50
EFFECTS OF CHRONIC EXPOSURE TO 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN ON CYTOGENETIC ENDPOINTS IN PERIPHERAL BLOOD LYMPHOCYTES OF THE RHESUS MONKEY
M. Lim, D. Jacobson-Kram, J.R. Williams
Johns Hopkins University Oncology Center, Baltimore, MD

51
EFFECT OF STEROID HORMONES ON CHROMOSOME CHANGES IN CULTURED CHO CELLS
T.S. Kochhar, M. Rueck, M. Cox, H. Doung, Kentucky State University, Frankfort, KY

52
IMMUNE RESPONSE AND CYTOGENETIC EFFECTS OF PRAZIQUANTEL ON CYSTICERCOTIC SWINE
R. Montero, A. Flisser, D. Gonzalez, A. Plancarte, D. Correa, M. Gomez-Chavarin, P. Ostrosky-Wegman
Instituto de Investigaciones Biomedicas, Mexico City, Mexico

53
INTERLABORATORY REPRODUCIBILITY OF CHEMICALS TESTED IN THE *IN VITRO* CHROMOSOME ABERRATION AND SISTER CHROMATID EXCHANGE ASSAYS
B.A. Talmer, E. Zeiger, M.A. Resnick
National Institute of Environmental Health Sciences, Research Triangle Park, NC

54
ANALYSIS OF CHROMOSOME ALTERATIONS DURING TUMOR DEVELOPMENT
C.B. Bast, R.J. Preston, R.J.M. Fry, Oak Ridge National Laboratory and University of Tennessee Graduate School of Biomedical Sciences, Oak Ridge, TN

55
RESTRICTION ENDONUCLEASE INDUCED CHROMOSOME ABERRATIONS IN HUMAN LYMPHOBLASTOID CELLS
R.J. Preston, G.J. Hook, R.A. Winegar, University of Tennessee Biomedical Graduate School and Oak Ridge National Laboratory, Oak Ridge, TN

56
THE EFFECTS OF HYDROXYUREA (HU) AND CYTOSINE ARABINOSIDE (araC) ON THE EXPRESSION OF THE COMMON FRAGILE SITE AT 3p14 (FRA3B)
X.Z. Li, Z.A. Yan, X.T. Zhou, Institute of Genetics, Academia Sinica, Beijing, China

57 (Late poster; no abstract)
THE USE OF FERTILISED ONE CELL EMBRYOS TO DETECT NUMERICAL CHROMOSOME ABERRATIONS
R. Albanese, (Imperial Chemical Industries PLC, Macclesfield Cheshire, England)

2501644863

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

X-NOV 90 18

FRIDAY, 4:00 PM
Ballroom 5

PROKARYOTIC MUTAGENESIS
T. Ong and R.A. Petroy,
Presiding

4:00
ANTIMUTAGENIC ACTIVITY OF CHLOROPHYLLIN AGAINST COMPLEX ENVIRONMENTAL MIXTURES AND CHEMICAL MUTAGENS USING A *SALMONELLA* FORWARD MUTATION ASSAY SYSTEM
J.H. Russell, J. Nath, T. Ong, West Virginia University and National Institute for Occupational Safety and Health, Morgantown, WV

4:15
THE INVOLVEMENT OF OXYGEN IN BISULFITE MUTAGENESIS
D.A. Pagano, E. Zeiger, National Institute of Environmental Health Sciences, Research Triangle Park, NC

4:30
MUTATIONAL SYNERGISM BETWEEN CHEMICAL MUTAGENS AND HIGHLY AROMATIC CHEMICAL MIXTURES
R.A. Petroy, D.L. Stewart, K.J. Sem, Pacific Northwest Laboratory, Richland, WA

4:45
MUTANTS OF *E. COLI* SENSITIVE TO PEROXIDE AND NEAR-ULTRAVIOLET RADIATION (NUV)
A. Eisenstark, University of Missouri, Columbia, MO

FRIDAY, 4:00 PM
Ballroom 6

MOLECULAR MECHANISMS IN MAMMALIAN CELLS
G.M. Adair and M. Mazur,
Presiding

4:00
BENZO(a)PYRENE DIOL EPOXIDE MUTAGENESIS AT THE *APRT* LOCUS IN CHO CELLS
M. Mazur, B.W. Glickman, York University, Toronto, Canada

4:15
THE SPECIFICITY OF UV-INDUCED MUTATIONS AT AN EN-DOGENOUS LOCUS IN MAMMALIAN CELLS
E.A. Drobetsky, A.J. Grosovsky, B.W. Glickman, York University, Toronto, Canada

4:30
KINDS OF MUTATIONS FORMED WHEN A SHUTTLE VECTOR CONTAINING ADDUCTS OF THE ANTI-7,8 DIOL 9,10-EPOXIDE OF BENZO[a]PYRENE (BPDE) REPLICATES IN HUMAN CELLS
J.L. Yang, V.M. Maher, J.J. McCormick, Michigan State University, East Lansing, MI

4:45
MUTATION, INACTIVATION, OR LOSS OF THE *APRT* GENE IN *APRT*- CHO CELL TRANSFECTANTS
G.M. Adair, R.S. Nairn, K.A. Bradreman, University of Texas System Cancer Center, Smithville, TX

2501644864

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

FRIDAY, 4:00 PM
Parlors 1-4

METABOLISM
W.F. Busby and S.S. Shane, Presiding

[redacted]ON OF NITRO-[redacted]TED FAH BY CHEMI-CA[redacted]UCTION IN THE AMES PLA[redacted]CORPORATION ASSAY
J.M. Golding, L.M. Ball, A. Gold, R. Sangalah, University of North Carolina, Chapel Hill, NC

4:15
MUTAGENICITY OF D- AND L-ISOMERS OF AZIRIDALANINE (AZIRIDIN METABOLITE)
W.M. Owen, R.C. [redacted] Khanna, R.A. Miller, Ya[redacted] University, Irbid, Jordan and [redacted]ington State University, Pullman, WA

4:30
MUTAGENIC AND CLASTOGENIC EFFECTS OF 1,3-DICHLORO-4 (DICHLOROMETHYL)-5 HYDROXY-2(5H)-FURANONE (MX) AND ITS DETOXICATION BY LIVER S9 COMPONENTS
J.R. Meier, W.F. Busby, R.B. Knudsen, U.S. Environmental Protection Agency, Cincinnati, OH and SRI International, Menlo Park, CA

4:45
ACTIVITIES OF XENOBIOTIC METABOLISM ENZYMES IN CELLS COMMONLY USED IN GENOTOXICITY ASSAYS
D. McGregor, I. Edwards, W. Caspary (helped by R. Tennant) Inveresk Research International Limited, Musselburgh, Scotland and National Institute of Environmental Health Sciences, Research Triangle Park, NC

FRIDAY, 4:00 PM
Parlors 7-9

GERM CELL AND HERITABLE MUTATIONS
R.L. Dobson and K.S. Lavappa, Presiding

4:00
CORRELATION BETWEEN ENDUCED MUTATION FREQUENCY AND DNA REPLICATION PROCESS IN MOUSE STEM CELL SPERMATOGONIA
W.L. Russell, P.K. Hunsicker, J.W. Bangham, Oak Ridge National Laboratory, Oak Ridge, TN

4:15
DNA BREAKAGE AND REPAIR IN MOUSE SPERMATOCYTES AND SPERMATIDS AFTER EXPOSURE TO X RAYS OR ETHYLENE OXIDE
G.A. Sega, E.S. Generoso, Oak Ridge National Laboratory, Oak Ridge, TN

4:30
GENETIC DAMAGE AND THE EXPRESSION OF BEHAVIORAL ABNORMALITIES IN THE PROGENY OF MALE RATS EXPOSED TO IONIZING RADIATION
M.C. Lamb, B. Hilsenbeck, W.W. Au, P.M. Adams, M.S. Legator, The University of Texas Medical Branch, Galveston, TX

4:45
RADIATION INDUCTION OF GENETIC DAMAGE IN MOUSE IMMATURE OOCYTES CONFIRMED AND MEASURED
R.L. Dobson, T. Strome, T.C. Kwan, Lawrence Livermore National Laboratory, Livermore, CA

2501644865

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

CX NOV 90 4/8

FRIDAY, 5:00 PM
Ballroom 5

PROKARYOTIC MUTAGENESIS
T. Ong and R.A. Pelroy, Presiding

5:00
MECHANISMS OF GLUTATHIONE MUTAGENICITY IN *SALMONELLA*
E. Zeiger, A.A. Stark, D.A. Pegram, National Institute of Environmental Health Sciences, Research Triangle Park, NC and Tel-Aviv University, Tel-Aviv, Israel

5:15
COMPARATIVE ANTIMUTAGENICITY OF FIVE COMPOUNDS AGAINST MUTAGENIC COMPLEX MIXTURES
T. Ong, W.Z. Whong, J. Stewart, H.E. Stockman, National Institute for Occupational Safety and Health, Morgantown, WV and Illinois State University, Normal, IL

5:30
MACROPHAGE-DERIVED OXYGEN FREE RADICALS INDUCE MUTATIONS IN *SALMONELLA* TA102
K. Parton, K. Mortelmans, SRI International, Menlo Park, CA

5:45
HISTIDINE BIOASSAY USING *SALMONELLA*: POSSIBLE APPLICATIONS TO AMES TEST
D.R. Bauer, G.T. Bryan, Armed Forces Institute of Pathology, Washington, D.C. and University of Wisconsin, Madison, WI

6:00
MAGNIFYING MEASUREMENT OF INDUCED MUTAGENIC RESPONSES IN THE AMES TEST
M.S. Mauri, V.G. Rasdan, USDA Western Regional Research Center, Berkeley, CA

FRIDAY, 5:00 PM
Ballroom 6

MOLECULAR MECHANISMS IN MAMMALIAN CELLS
G.M. Adair and M. Masur, Presiding

5:00
A COMPARISON OF MUTATIONS INDUCED BY X RAYS AND ETHYLMETHANESULFONATE (EMS) AT THE *HGPRT* AND *TK* LOCI IN TK6 HUMAN LYMPHOBLAST CELLS
H.L. Liber, D.W. Yandell, J.B. Little, Harvard School of Public Health, Boston, MA

5:15
IN VITRO MUTATION INDUCTION BY GAMMA IRRADIATION IN HUMAN T LYMPHOCYTES
J.P. O'Neill, I.M. Sullivan, J.A. Nelson, T.C. Hunter, R.J. Albertini, University of Vermont, Burlington, VT

5:30
THE RELATIONSHIP BETWEEN BENZO(A)PYRENE DIOL EPOXIDE DNA ADDUCTS AND MUTAGENICITY IN THE CHO/*HGPRT* ASSAY
L. Berio, L.R. Shugart, A.W. Hsie (Issued by J.S. Wanson), University of Kentucky, Lexington, KY, Oak Ridge National Laboratory, Oak Ridge, TN, and The University of Texas Medical Branch, Galveston, TX

5:45
ANALYSIS OF DNA ADDUCTS FORMATION AND GENE MUTATION INDUCTION BY N-METHYL- AND N-ETHYL-N-NITROSOUREA IN MAMMALIAN CELLS (CHO/*HGPRT* ASSAY)
H.W. Thielmann, C.H. Schroeder, A.W. Hsie (Issued by E.S. Von Hofe), German Cancer Research Center, Heidelberg, Federal Republic of Germany, Oak Ridge National Laboratory, Oak Ridge, TN, and The University of Texas Medical Branch, Galveston, TX

2501644866

06 NOV 90 tg

FRIDAY, 5:00 PM
Parlors 1-3

METABOLISM
W.F. Blazak and B.S. Shane, Presiding

5:00
A COMPARATIVE STUDY OF THE ACTIVATION OF BENZO(A)-PYRENE (BP) AND 2-AMINOFLUORENE(AF) TO MUTAGENS BY HEPATIC S9 FRACTIONS FROM CRAYFISH, FISH AND RATS, AS MEASURED IN THE AMES ASSAY
B.S. Shane, A.M. Troxclair, C.S. Jewell, G.W. Winston, Louisiana State University, Baton Rouge, LA

5:15
HYPOCHLORITE ACTIVATION OF B[a]P 7,8-DIHYDRODIOLS TO MUTAGENS. A MECHANISM FOR MUTAGENIC ACTIVATION BY STIMULATED POLYMORPHONUCLEAR LEUKOCYTES?
H.H. Seliger, W.H. Koch, G.H. Poster, The Johns Hopkins University, Baltimore, MD

5:30
FACTORS RESPONSIBLE FOR SPECIES DIFFERENCES IN BLADDER CANCER INDUCTION
Y. Shaffet, S. Knowles, V. Schaur, T.K. Rall, R. Lappenbusch, Integrated Laboratory Systems, and National Institute of Environmental Health Sciences, Research Triangle Park, NC

5:45
EFFECT OF DIETARY *TRANS* FATTY ACIDS ON MUTAGENICITY
N.R. Green, M. Schauk, Florida State University, Tallahassee, FL

FRIDAY, 5:00 PM
Parlors 7-9

GERM CELL AND HERITABLE MUTATIONS
R.L. Dobson and K.S. Lavappa, Presiding

5:00
VINCRISTINE-INDUCED ANEUPLOIDY IN GERMINAL AND SOMATIC CELLS OF THE CHINESE HAMSTER
K.S. Lavappa, M.W. O'Donnell, C.W. Shea, U.S. Food and Drug Administration, Washington, DC

5:15
INVESTIGATION OF ABNORMAL FOETUSES IN THE LITTERS OF MALE RATS CHRONICALLY TREATED WITH CYCLOPHOSPHAMIDE
D. Anderson, F.C. Jenkinson, S.D. Gangolli, British Industry Biological Research Association, Carshalton, Surrey, UK

5:30
TWO-DIMENSIONAL GEL ELECTROPHORESIS FOR THE DETECTION OF HERITABLE MUTATIONS AS QUANTITATIVE ALTERATIONS IN PROTEIN EXPRESSION
C.S. Giometti, J. Taylor, D. Graham, Argonne National Laboratory, Argonne, IL

5:45
MOLECULAR ANALYSIS OF DIEPOXYBUTANE INDUCED MUTATIONS IN *DROSOPHILA MELANOGASTER*
J.T. Reardon (Introd. by P.D. Smith), Southern Methodist University, Dallas, TX

2501644867

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90

Cellular and Molecular Toxicology Services

Northrop's highly qualified toxicology staff identifies and measures the adverse health effects of chemicals and environmental pollutants. Our scientists evaluate health effects at the molecular, cellular, organ, and whole animal levels.

NSI ES is committed to providing high-quality, cost-effective research and testing services to meet the exacting standards required of industry and the government.

- Mutagenesis Assays
- Sister Chromatid Exchange and Chromosome Aberration Analysis
- Unscheduled DNA Synthesis
- *In Vitro* Teratogenesis Assays
- Pulmonary Epithelial Cell Assays
- Biochemical and Metabolic Analysis
- Detection of Viruses
- Cell Transformation Assays
- Induction of Retrovirus-mediated Transformation
- Enhancement of Viral Transformation
- Cytotoxicity Testing
- Inhibition of Metabolic Cooperation
- Epidermal Cell Proliferation
- Sterility Testing

For information, call Dr. Eugene Elmore at (919) 549-0651 or write to:

Northrop Services, Inc.—
Environmental Sciences
P.O. Box 12313
Research Triangle Park, NC 27709
(919) 549-0651

2501644868

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV. 90 18

SATURDAY, 1:30 PM
Ballroom 5

CYTOGENETIC TESTING II
R.J. Preston, Presiding

1:30
SCE FREQUENCIES IN CHO CELLS EXPOSED SIMULTANEOUSLY TO ADRIAMYCIN AND RADIOFREQUENCY RADIATION
V. Chravind, M.L. Meltz, D.N. Erwin, University of Texas Health Science Center and USAF School of Aerospace Medicine, San Antonio, TX

1:45
INTERACTION OF RESTRICTION ENDONUCLEASE-INDUCED DNA DAMAGE WITH DNA REPAIR INHIBITORS IN THE PRODUCTION OF CHROMOSOME ABERRATIONS
R.A. Winegar and R.J. Preston, University of Tennessee, Oak Ridge National Laboratory, Oak Ridge, TN

2:00
MUTAGEN HYPERSENSITIVITY AND MUTAGEN-INDUCED CHROMOSOME BREAKAGE IN HUMAN FIBROBLASTS
N.L. Rudd, D.J. Hoar, C. Nagata, L.S. Dimitk, U.G.G. Hennig, University of Calgary, Calgary, Alberta, Canada

2:15
KINETICS OF CELL CYCLE PROGRESSION IN DOWN SYNDROM (DS) AND NORMAL LYMPHOCYTES
H.M. Shafik, M.A. Nolin, W.W. Au, M.S. Legator, The University of Texas Medical Branch, Galveston, TX

2:30
IN VITRO CYTOGENETIC TESTING USING SISTER CHROMATID EXCHANGE AND CHROMOSOME ABERRATION ENDPOINTS IN CHO CELLS
K.S. Loveday, M.J. Morris, E. Zeiger, American Biogenics Corporation, Woburn, MA and NIEHS, RTP, NC

SATURDAY, 1:30 PM
Ballroom 6

TEST STRATEGIES AND ASSESSMENT
W.R. Lower, Presiding

1:30
TESTING THE PREDICTIVITY OF BATTERIES OF SHORT-TERM GENOTOXICITY TESTS FOR CARCINOGENIC POTENCY
F.K. Ennever, H.S. Rosenkranz, Case Western Reserve University School of Medicine, Cleveland, OH

1:45
SHORT-TERM TEST ACTIVITY PROFILES: APPLICATION IN THE IARC MONOGRAPHS PROGRAMME
M.D. Waters, H.F. Stack, A.L. Brady, P.H.M. Lohman, L. Haroun, H. Vainio, USEPA, EHRT Inc., RTP, NC; TNO - Medical Laboratory, Rijswijk, The Netherlands; and International Agency for Research on Cancer, Lyon, France

2:00
THE RELATIONSHIP BETWEEN CHEMICAL STRUCTURE OF NITROFLUORENONES AND NITROFLUORENES AND THEIR GENOTOXIC ACTIVITY
R.M. Kitchin, W.E. Bechtold, A.L. Brooks (Introd. by N.D. Stephens), University of Wyoming, Laramie, WY and Inhalation Toxicology Research Institute, Albuquerque, NM

2:15
A TEST OF THE UNIFORMITY OF RADIATION-INDUCED MUTATION RATES
G.V. Johnson, M.J. Plewa, University of Illinois, Urbana, IL

2:30
STATUS OF *IN SITU* ENVIRONMENTAL GENOTOXIC SENTINELS
W.R. Lower, S.S. Sandhu, University of Missouri, Columbia, MO and U.S. Environmental Protection Agency, Research Triangle Park, NC

2501644869

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

OC ABV 40 48

SATURDAY, 1:30 PM
Parlors 1-3

MECHANISMS IN NON-MAMMALIAN EUKARYOTES
R.C. von Borstel, Presiding

1:30
CHARACTERIZATION OF YEAST MUTATION *ssd* THAT ENHANCES PERMEABILITY OF *SACCHAROMYCES CEREVISIA*
B. Winsor, A.A. Potier, F. Karst, F.R. Neumann, F. Lacroute, Centre National Recherche Scientifique, Strasbourg, France, Université de Poitiers, France, Veterinary Infectious Disease Organization, Saskatoon, and Department of Health and Welfare, Ottawa, Ontario, Canada

1:45
STUDY OF THE MODIFICATION OF THE HETEROZYGOUS EFFECTS OF MULTIGENIC DELETION MUTATIONS IN THE *ADE* REGION OF *NEUROSPORA CRASSA* BY MEANS OF GENETICALLY MARKED THREE COMPONENT HETEROKARYONS
F.J. de Serres, I.R. Miller, Research Triangle Institute, RTP, NC and Oak Ridge National Laboratory, Oak Ridge, TN

2:00
DEVELOPMENT OF pMP4, A SHUTTLE VECTOR FOR USE IN DEFINING FRAMESHIFT MUTATIONS AT THE *ade 10* REGION OF YEAST
M.J. Flewa, D. Kellenberger, P.L. Larimer, University of Illinois, Urbana, IL and Oak Ridge National Laboratory, Oak Ridge, TN

2:15
ANALYSIS OF REVERSIONS INDUCED BY SODIUM CHLORIDE AND POTASSIUM CHLORIDE IN YEAST
K.R. Parker, R.C. von Borstel, University of Alberta, Edmonton, Alberta, Canada

SATURDAY, 1:30 PM
Parlors 7-9

PLANT GENETIC TOXICOLOGY
J.M. Gentile, Presiding

1:30
DIETHYLDITHIOCARBAMATE INHIBITS THE ACTIVATION OF 2-AMINOFLUORENE BY CULTURED TOBACCO CELLS
E.D. Wagner, M.J. Flewa, J.M. Gentile, University of Illinois, Urbana, IL and Hope College, Holland, MI

1:45
PROMUTAGEN ACTIVATION BY PHOTOSYNTHETIC AND NON-PHOTOSYNTHETIC PLANT CELL CULTURES
J. Day, G.J. Gentile, J.M. Gentile, M.J. Flewa, Hope College, Holland, MI and University of Illinois, Urbana, IL

2:00
TRADESCANTIA MICRONUCLEUS (TRAD MCN) ASSAY: A POTENTIAL INDOOR POLLUTION MONITOR
T.H. Ma, M.M. Harris, Western Illinois University, Macomb, IL

2:15
THE EFFICACY OF THE ROOT TIP CELL MICRONUCLEUS ASSAY FOR WATER POLLUTANTS
T.H. Ma, Z. Xu, G.L. Cabrera, R.M.E. Valdera, G.G. Arreola, Western Illinois University, Macomb, IL and Universidad Autonoma de Queretaro, Mexico

2:16
MOLECULAR DOSIMETRY STUDIES OF FORWARD MUTATION INDUCED AT THE *w2* LOCUS IN MAIZE BY ETHYL METHANESULFONATE
W.E. Nelz, M.J. Flewa, University of Illinois, Urbana, IL

2501644870

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

OCT 18 90 tyt

•••••••••• NOTES ••••••••••

Hanzyk, Eugene
Dept. of Environmental Sciences
Cornell Univ. Ithaca NY
Claimant No.
44406 (Oh)

4

2501644871

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

SATURDAY, 11 APRIL 1987
Ballroom 4
2:30 - 4:00 PM

POSTER SESSION III

Posters are to be set up by 9:00 am of their scheduled day, and to remain up for viewing until 5:00 pm. It is required that an author be present during the scheduled poster session.

Coffee will be available at the beginning of the Poster Session.

TEST BATTERIES

1
RELATIONSHIPS BETWEEN *IN VITRO* GENETIC TOXICITY AND RODENT CARCINOGENICITY
F. Zeiger
National Institute of Environmental Health Sciences, Research Triangle Park, NC

2
CONCORDANCE OF RESULTS BETWEEN *IN VITRO* MAMMALIAN CELL MUTAGENESIS AND CLASTOGENESIS ASSAYS
A.D. Mitchell, W.S. Caspary
Genetox Research, Incorporated, Mountain View, CA and National Institute of Environmental Health Sciences, Research Triangle Park, NC

3
ASSESSING A SAR BATTERY APPROACH FOR PREDICTING GENOTOXICITY
L.D. Claxton, M. Miller, B. Walsh
U.S. Environmental Protection Agency and Environmental Health Research and Testing, Research Triangle Park, NC

4
THE ESTABLISHMENT OF A MICROCOMPUTER SYSTEM FOR GENETIC TOXICOLOGY DEVELOPED FROM THE "COMPUTERIZED LABORATORY NOTEBOOK" PROJECT
C.H.S. Strauss, W.T. Stanford, S.J. Berkowitz
U.S. Environmental Protection Agency and Environmental Health Research and Testing, Research Triangle Park, NC

5
A FLUORESCENCE PHOTOMICROSCOPE METHOD FOR DETECTING THE PRESENCE OF ACTIVE ENZYMES IN THE MIXED FUNCTION OXIDASE (MFO) SYSTEM IN S-9 MIXES AND OTHER PREPARATIONS
M.J. Ferguson
University of Texas Health Science Center, Dallas, TX

6
ETOPOSIDE (VP-16) AND TENIPOSIDE (VM26): NOVEL ANTICANCER DRUGS, STRONGLY MUTAGENIC IN MAMMALIAN BUT NOT PROKARYOTIC TEST SYSTEMS
R.S. Gupta, A. Dronkers, D.W. Bryan, R. Gupta, B. Singh, D.R. McCalla
McMaster University, Hamilton, Ontario, Canada

2501644872

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

7
AN *IN VITRO* AND *IN VIVO* EVALUATION OF THE GENOTOXIC POTENTIAL OF 2,4-PENTANEDIONE
P.J. Gazzie, R.S. Stasinski, B. Ballantyne
Union Carbide Corporation, Kenvil, PA

8
COMPARISON OF FECAPENTAENES IN THE *SALMONELLA TYPHIMURIUM* AND L5178Y MOUSE LYMPHOMA CELL MUTAGENESIS ASSAYS
E.S. Riccio, C.J. Rudd, K.R. Stewart, P.S. Lee, E.J. Rehl, J.H. Byers
SRI International, Menlo Park, CA

9
THE GENOTOXIC POTENTIAL OF ISOPHORONE
R.H. McKee, R.D. Phillips, R.A. Lerman, R.S. Stasinski, A.M. Rogers Rock, R.D. Curren, D.J. Pulman
Exxon Biomedical Sciences Incorporated, East Millstone, NJ, Rusty Rose Research Center/Mellon Institute-Union Carbide Corporation, Kenvil, PA, and Microbiological Associates Incorporated, Bethesda, MD

10
A STUDY OF HIGH LUNG CANCER MORTALITY IN XUAN WEI COUNTY: MUTAGENICITY AND CARCINOGENICITY OF INDOOR AIR PARTICLES FROM COAL AND WOOD COMBUSTION
J.L. Mumford, C.D. Helmes, J. Schlenger, C.J. Rudd, P.S. Lee, V. Hunt, K. Nemmar, X.M. Li
U.S. Environmental Protection Agency, Research Triangle Park, SRI International, Menlo Park, CA, and Institute of Environmental Health and Engineering, Beijing, China

PLANTS, FUNGI, *DROSOPHILA*

11
UTILITY OF *ARABIDOPSIS* EMBRYO ASSAY FOR TESTING COMPLEX MIXTURES
G.N. Acedo, S.S. Sandhu, D.M. DeMarini, J.L. Mumford
Environmental Health Research and Testing, and U.S. Environmental Protection Agency, Research Triangle Park, NC

12
MUTAGENICITY OF PESTICIDES IN BARLEY PROGENY TEST SYSTEM
C.B.R. Sharma, N. Panneerselvam
Bharathiar University, Coimbatore, India

13
ACTIVATION OF PROMUTAGENS BY ALGAE
M. Lippert, J.M. Gentile, M.J. Plewa
Hope College, Holland, MI and University of Illinois, Urbana, IL

14
THE ACTIVATION OF A NITRATED PYRENE MIXTURE TO MORE POTENT MUTAGENS BY PLANT S9 AND SUPEROXIDE DISMUTASE (SOD)
A.L. Lomax, B.S. Shane
Louisiana State University, Baton Rouge, LA

2501644873

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

15
CURRENT DEVELOPMENT OF A LONG TERM TEST WITH YEAST STRAIN MP1
R. Fahrig
Fraunhofer-Institut fur Toxikologie und Aerosolforschung, Hannover, Federal Republic of Germany

16
DNA SEQUENCE ANALYSIS OF UV-INDUCED MUTATIONS IN YEAST
B.A. Kunz, M.K. Pierce, C.N. Giroux
University of Manitoba, Winnipeg, Manitoba, Canada, York University, Toronto, Ontario, Canada, and National Institute of Environmental Health Sciences, Research Triangle Park, NC

17
A METHOD FOR SELECTING DOSES FOR THE *DROSOPHILA* SEX-LINKED RECESSIVE LETHAL ASSAY
E.D. Thompson, B.A. Reeder
Procter and Gamble Company, Cincinnati, OH

18
MUTAGENICITY OF VOLATIVE ANESTHETIC AND NITROUS OXIDE COMBINATIONS
J.M. Baden, Y.R. Kundomal
Stanford University School of Medicine and Veterans Administration Medical Center, Palo Alto, CA

FISH, AMPHIBIANS, BIRDS

19
EVALUATION OF GENOTOXICITY USING AN ESTUARINE FISH, *FUNDULUS HETEROCLITUS*
C.H. Dalich, J.C. Means
Chesapeake Biological Laboratory, Solomons, MD

20
THE BULLFROG (*RANA CATESBEIANA*) TADPOLE - A POTENTIAL ORGANISM FOR CYTOGENETIC BIOASSAY FOR FRESHWATER POLLUTION
T.H. McGill, Cabrera, K.S. Kim
Western Illinois University, Macomb, IL

21
EFFECT OF CHROMIUM-INDUCED DNA DAMAGE ON GENE EXPRESSION IN THE CHICK EMBRYO *IN VIVO*
J.W. Hamilton, K.E. Wetterhahn
Dartmouth College, Hanover, NH

2501644874

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

METABOLISM

22
DETECTION, ISOLATION AND PARTIAL CHARACTERIZATION OF NITROARENE ADDUCTS OF DNA USING A POST-LABELLING TECHNIQUE AND A COMBINATION OF TLC AND ION-PAIRING HPLC
I.B. Lambert, D.W. Bryant, L. Davison, D.R. McCalla
McMaster University, Hamilton, Ontario, Canada

23
BACTERIAL MUTAGENICITY AND REDUCTIVE METABOLISM OF 1, 3- AND 6-NITROSOBENZO(a)PYRENE
P.P. Fu, J.R. Thornton-Manning, L.E. Unrah, L.S. Von Tungeln, R.H. Heflich (Introd. by W.D. Mercker)
National Center for Toxicological Research, Jefferson, AR

24
MICROSOMAL METABOLISM OF 9,10-DIHYDROXYMETHYLBENZ(a)ANTHRACENE: IDENTIFICATION, ABSOLUTE CONFIGURATIONS, AND MUTAGENICITY OF METABOLITES
L.S. Von Tungeln, E.A. Dorva, R.H. Heflich, P.P. Fu, N.-T. Wang (Introd. by D.T. Bernert)
National Center for Toxicological Research, Jefferson, AR and Horng Kuang College, Shu-Te, Taikhung, Taiwan, Republic of China

25
METABOLISM OF 1- AND 3-NITROBENZO(a)PYRENE TO MUTAGENS IN THE CHO/HGPRT ASSAY
R.H. Heflich, M.W. Chou, J.R. Thornton-Manning, L.E. Unrah, P.P. Fu
National Center for Toxicological Research, Jefferson, AR

26
METABOLIC ACTIVATION OF α-NAPHTHOFLAVONE BY THE CYTOCHROME P-450 SYSTEM PRODUCES CLASTOGENICITY
M. Andrias, G.W. Lucier, J.A. Goldstein, M. Graham, C. Thompson (Introd. by W. Sheridan)
National Institute of Environmental Health Sciences, Research Triangle Park, NC

27
RELATIONSHIP BETWEEN CLASTOGENICITY OF α-NAPHTHOFLAVONE IN CHO CELLS AND DNA ADDUCT FORMATION
C. Thompson, M. Andrias, G. Lucier (Introd. by M. Shelby)
National Institute of Environmental Health Sciences, Research Triangle Park, NC

28
PROMUTAGEN ACTIVATION BY MAMMALIAN HEPATIC S9 FROM METABOLICALLY ALTERED ORGANISMS
D. Heydenburg, T.S. Herrick, C.C. Barney, J.M. Gentile
Hope College, Holland, MI

29
METABOLISM OF NITROARENES IN *SALMONELLA TYPHIMURIUM*: EVIDENCE FOR AN ENZYME COMPLEX WHICH BOTH REDUCES AND ACETYLATES 1,8-DINITROPYRENE
F. Orr, D.W. Bryant, D.R. McCalla
McMaster University, Hamilton, Ontario, Canada

2501644875

OC NOV 90. RX

30
AN ULTRASENSITIVE ENZYME IMMUNOASSAY DETECTOR FOR HPLC: APPLICATION TO METABOLIC MONITORING
A.M. Cheh, T.A. Dwighlade, V.C. Ross
American University, Washington, DC

31
INCREASED RESPONSE IN PREMUTAGENS BIOACTIVATION BY REPEATED ADMINISTRATIONS OF CYTOCHROME P-450 AND P-448 INDUCERS
M. Fiorini, F. Hrelia, E. Sapigni, L. Morelli, G. Cantelli-Forti
Instituto di Farmacologia dell'Università, Bologna, Italy

32
THE ANTIMUTAGENESIS OF OXIDIZED GLUTATHIONE AGAINST AFLATOXINS AND METABOLITES IN THE *SALMONELLA*-MUTAGENICITY TEST
C.L. Kim-Yourtee, D.M. Yourtee, R.C. Lanman
University of Missouri, Kansas City, MO

MAMMALIAN CELLS *IN VIVO*

33
DETECTION OF *DIPTHERIA* TOXIN- AND 8-AZAGUANINE-RESISTANT HAMSTER RESPIRATORY TRACT CELLS FOLLOWING *IN VIVO* ADMINISTRATION OF MUTAGENS
D.B. Coub, K. Jala, A.G. Bouch, J.A. Heddle
York University, Downsview, Ontario, Canada

34
MUTAGENESIS *IN VIVO*: PRELIMINARY EXPERIMENTS WHICH CONFIRM THE FEASIBILITY OF THE DETECTION OF ETHYLNITROSOUREA (ENU)-MUTAGENESIS IN MOUSE T LYMPHOCYTES
D.M. Zimmer, C.S. Aaron
The Upjohn Company, Kalamazoo, MI

35
THE MOUSE *IN VIVO* MODEL FOR SOMATIC MUTATION AT THE *HPRT* LOCUS: CURRENT STUDIES
I.M. Jones, K Burkhart Schultz, C.L. Stout, T.L. Cripps
Lawrence Livermore National Laboratory, Livermore, CA

36
ACTIVITY OF TRITIATED THYMIDINE IN THE MOUSE BONE MARROW MICRONUCLEUS ASSAY
F. Ratpan, J. Ashby
Polymer Limited, Sarnia, Ontario, Canada, and Imperial Chemical Industries Plc, Alderley Park, UK

37
FACTORS AFFECTING THE TISSUE-SPECIFIC INDUCTION OF SISTER CHROMATID EXCHANGES IN MICE
D.H. Blakey, R.D.L. Ball
Health and Welfare Canada, Ottawa, Ontario, Canada

2501644876

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 JJ

38
THE INDUCTION OF SCE IN THE BONE MARROW OF B6C3F1 MICE FOLLOWING SINGLE OR REPEATED INHALATION OF BENZENE
A.L. Brodar, P.J. Sabourin, R.F. Henderson
Lovelace Inhalation Toxicology Research Institute, Albuquerque, NM

39
COMPARISON OF *IN VIVO* CYTOGENETIC MEASUREMENTS OF CHROMOSOMAL REPLICONS IN MOUSE BONE MARROW AND SPERMATOGONIAL CELLS
M.H. Lego, H.F. Raschke, J.W. Allen, J.C. Hozier
Florida Institute of Technology, Melbourne, FL and U.S. Environmental Protection Agency, Research Triangle Park, NC

40
PREDICTION OF ENVIRONMENTAL STOMACH CARCINOGENS AND PROMOTERS BY *IN VIVO* SHORT-TERM ASSAY
C. Furihata, T. Matsushima
University of Tokyo, Tokyo, Japan

41
APPLICATION OF THE PERIPHERAL BLOOD ERYTHROCYTE MICRONUCLEUS ASSAY TO DETECTION OF CHROMOSOMAL DAMAGE FROM REPEATED EXPOSURES TO GENOTOXINS
C.M. Weber, P.R. Hesslin, J.T. MacGregor
U.S. Department of Agriculture, ARS, Berkeley, CA

42
DEVELOPMENT OF A SUBACUTE PERIPHERAL BLOOD MICRONUCLEUS ASSAY IN MALE AND FEMALE ICR MICE
H.D. Zakowski, J.J. Hall
Hazleton Laboratories America, Incorporated, Kensington, MD

43
GENOTOXIC INTERACTIONS OF HEAVY METALS IN HEPATOCYTES
M. Marion, D. Jacques, F. Denizeau
Université du Québec à Montréal, Montréal, Québec, Canada

44
GENOTOXIC EFFECTS IN RAT AFTER *IN VIVO* TREATMENT WITH A BENZIDINE DERIVED AZO DYE
B.K.M. Belle
Stockholm University, Stockholm, Sweden

45
URINE MUTAGENICITY IN RATS AS AN *IN VIVO* INDEX OF GENOTOXIC EXPOSURE
C.A. Hahn, D.A. Lee, C.K. Lee, D.J. Doolittle
R.J. Reynolds Tobacco Company, Winston-Salem, NC

2501644877

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90 18

MAMMALIAN GERM CELLS

46
CYCLOPHOSPHAMIDE-INDUCED DAMAGE TO SYNAPTONEMAL COMPLEXES AND METAPHASE CHROMOSOMES IN MOUSE MEIOTIC CELLS
L.C. Becker, J.B. Gibson, M.J. Moore, J.W. Allen
U.S. Environmental Protection Agency, Research Triangle Park and Duke University, Durham, NC

47
UTILIZATION OF SEMINIFEROUS TUBULE SEGMENTS TO STUDY UNSCHEDULED DNA SYNTHESIS (UDS) IN MALE RATS EXPOSED TO METHYL METHANESULFONATE (MMS)
K.S. Bentley, P.K. Working (Introd. by D. Shipese)
Chemical Industry Institute of Technology, Research Triangle Park, NC

48
DIFFERENTIAL SENSITIVITY OF PREOVULATORY MOUSE OOCYTES TO COLCHICINE INDUCED ANEUPLOIDY
J.B. Mailes, Z.P. Yuan
Louisiana State University Medical Center, Shreveport, LA

49
EFFECTS OF ACRYLAMIDE AND ACRYLONITRILE ON UNSCHEDULED DNA SYNTHESIS (UDS) IN RAT SPERMATOCYTES
M.E. Hurtt, K.S. Bentley, P.K. Working
Chemical Industry Institute of Toxicology, Research Triangle Park, NC

50
DOMINANT LETHAL ASSAY OF ACRYLONITRILE AND ACRYLAMIDE IN THE MALE RAT
P.K. Working, K.S. Bentley, M.E. Hurtt, K.L. Mohr
Chemical Industry Institute of Technology, Research Triangle Park, NC

51
IN VITRO DOMINANT LETHAL ASSESSMENT OF ETHYL METHANESULFONATE (EMS)-INDUCED OOCYTE DAMAGE IN THE MOUSE
K[illegible] Working (Introd. by T. Craft)
C[illegible]ry Institute of Technology, Research Triangle Park, NC

52
ASSESSMENT OF FETAL DEATH RATE AMONG *IN UTERO* PROGENY OF B6C3F1 AND CD-1 MICE AFTER SUBCUTANEOUS INJECTIONS OF MALES WITH BUTYL BENZYL PHTHALATE (BBP)
J.B. Bishop, C.M. Teaf, B. Bhooshan
National Institute of Environmental Health Sciences, Research Triangle Park, N.C. and Florida State University, Tallahassee, FL, Consumer Products Safety Commission, Washington, DC.

2501644878

06 NOV 90 - 1/8

HUMAN POPULATION MONITORING

53
ASSOCIATIONS BETWEEN MATERNAL SMOKING AND DNA ADDUCTS IN HUMAN PLACENTA DETECTED BY 32P-POSTLABELING: QUANTITATIVE ASPECTS
R.B. Everson, K. Randerath, T.A. Avitts, K. Randerath
National Institute of Environmental Health Sciences, Research Triangle Park, NC and Baylor College of Medicine, Houston, TX

54
CHARACTERISATION OF DNA ADDUCTS IN PLACENTAS OF INDIVIDUALS EXPOSED TO HIGH LEVELS OF 'SMOKY' COAL COMBUSTION EMISSIONS
I.G.C. Robertson, J. Lewtas, X.M. LI, T.L. Mumford
U.S. Environmental Protection Agency, Research Triangle Park, NC, and Institute of Environmental Health and Engineering, Beijing, China

55
SOUTHERN BLOT ANALYSIS OF *IN VIVO* DERIVED hprt MUTANT T-CELL CLONES
J.A. Nickas, T.C. Hunter, J.P. O'Neill, R.J. Albertini
University of Vermont, Burlington, VT

56
DEMONSTRATION THAT BrdU LABELLING COULD BE USED IN THE ALBERTINI ASSAY
M. Gomez Chavarin, R. Montero, P. Ostrosky-Wegman, C. Cortinas de Nava, R. Tice, R. Albertini (Intro. by M. Cullen)
Instituto de Investigaciones Biomedicas, Mexico City, Mexico, Brookhaven National Laboratories, Upton, NY, and University of Vermont, Burlington, VT

57
MARKERS OF BIOLOGICALLY EFFECTIVE DOSE OF CISPLATINUM-BASED CHEMOTHERAPY IN CANCER PATIENTS
F.P. Perera, H.K. Fleshman, M. Stoopler, M.C. Poirier, E. Reed
Columbia University, New York, NY and National Cancer Institute, Bethesda, MD

58
FREQUENCY OF DOUBLE FLUORESCENT BODIES IN SPERM OF MALES SEEN FOR IMPAIRED FERTILITY
P.E. Bubbles Jr., J.B. Ward, Jr., M.S. Legator
The University of Texas Medical Branch, Galveston, TX

2501644879

06 NOV 90 tg

SATURDAY, 4:00 pm - 6:00 pm SYMPOSIUM

SHORT-TERM TESTS AND THE RODENT BIOASSAY: A CRITICAL EVALUATION

Ballroom 5 David J. Brusick, Presiding

Sponsor: SRI International

One of the more controversial aspects of genetic toxicology testing is the mechanistic and correlative associations between short-term test results and *in vivo* responses. This symposium will address both associations as they exist for heritable genetic damage and cancer in rodent bioassays. The format will consist of brief prepared presentations describing the information as it exists followed by a scientific forum among panelists familiar with the complexities of this issue. The objective is to provide both a perspective on the development of the data as well as a direction for future efforts in reconciling apparent inconsistencies.

4:00 PERFORMANCE OF SHORT TERM TESTS - MUTAGENESIS
Barry Margolin
National Institute of Environmental Health Sciences

4:25 PERFORMANCE OF SHORT TERM TESTS - CARCINOGENESIS
Joseph Haseman
National Institute of Environmental Health Sciences

4:45 PERFORMANCE OF THE RODENT BIOASSAYS - CARCINOGENESIS
Stephen Nesnow
U.S. Environmental Protection Agency

5:05 PERFORMANCE OF THE RODENT BIOASSAYS - MUTAGENESIS
Michael Shelby
National Institute of Environmental Health Sciences

5:25 PANEL DISCUSSION

John Ashby
Imperial Chemical Industries, U.K.

Donald Cove
Burroughs Wellcome Co.

Marvin Legator
University of Texas, Galveston

Mortimer Mendelsohn
Lawrence Livermore National Laboratory

Ian Monroe
CanTox, Inc.

Verne Ray
Pfizer, Inc.

Herbert Rosenkranz
Case Western Reserve University

2501644880

06 Nov 90 tg

INDEX

All authors are listed according to the page(s) on which their presentations appear.

Aaron, C.S., 43, 44, 65
Abernethy, D.J., 21, 31
Aboul-Enein, H.Y., 46
Acedo, G.N., 34; 62
Adair, G.M., 32, 50
Adams, N., 12
Adams, P.M., 51
Adler, I.-D., 20
Afzal, V., 14, 14
Argerman, A., 30
Akiyama, M., 34
Albanese, R., 49
Albertini, R.J., 15, 19, 34, 52, 60, 66
Alderfeshi, T., 22
Allen, J.W., 45, 48, 66, 67
Allen, K.L., 15
Al-Dekan, A.A.R., 46
Ammenhouser, M.M., 15
Antonov, A.L., 15
Anders, M.E., 16
Anderson, D., 53
Anden, E., 23
Andrea, M., 54, 64
Aaness, J.L., 32, 52
Applegate, M., 27
Arenaz, P., 46, 48
Arimoto, S., 35
Armstrong, M.J., 48
Arpola, G.G., 57
Ashby, J., 20, 65, 69
Atwal, B.S., 22, 34, 36
Au, W.W., 22, 22, 33, 46, 51, 56
Avan, T.A., 68

Back, A.M., 27
Backer, L.C., 67
Baden, J.M., 63
Baker, Z.A., 22
Baller, R.M., 35
Ball, L.M., 51
Ballantyne, B., 63
Bilwinn, P.S., 26
Bangham, J.W., 51
Barber, C., 67
Barbanchi, T.R., 30, 68
Barnes, W.S., 47
Barnes, C.C., 64
Barnes, N., 46
Bartlett, I.D., 44
Basl, C.B., 49
Bassan, M., 45
Bechtold, W.E., 58
Becker, C., 15
Beije, B.K.M., 60
Bell, D.A., 21
Bell, R.D.L., 65
Benjamin, M.A., 35
Bindarello, K.B., 45
Bentley, K.S., 67, 67
Berkowitz, S.J., 61
Bernstein, I.K., 15
Bernandez, E., 28
Berta, M.J., 36
Bhoushan, B., 67
Bibbins Jr., P.E., 68
Bickham, J.W., 22
Bierzcat, M.J., 36
Bigbee, W.L., 17, 17, 20
Bishop, J.E., 67
Blackman, D.C., 49
Blackburn, G.E., 28, 30, 50
Blabey, D.H., 13, 60

2501644881

Blank, W.B., 15, 28, 49, 51
Bleicher Jr., W.T., 16
Blevins, R.D., 43
Bodell, W.J., 16
Bolly, J., 34
Borello, C.J., 21, 31, 31
Bouch, A.O., 65
Bowles, R., 47
Boyes, R.O., 19
Bradley, W.B.C., 34
Bradley, W.O., 44
Brady, A.L., 36
Braithwaite, L., 20
Brandt, H., 17
Brennan, J., 32
Bruce, K., 12, 27, 31, 47
Bruhlman, H.E., 46, 22
Bruder, C., 27
Brugger, A., 41
Bruhlman, K.W., 44
Brunk, A.L., 36, 46
Brutherman, K.L., 12, 30
Brown, B.U., 30
Brown, J.E., 13
Bruce, W.R., 19
Bryan, F.W., 32
Bryant, D., 46
Bryan, O.T., 32
Bryant, H.W., 41, 44, 64
Bugros, J.D., 26
Burkhart-Schaffer, K., 65
Burns, C., 33
Burns, F.A., 14
Burrell, A., 27
Burton, R., 14
Bush, D.B., 32
Butterworth, H.R., 30
Byers, P., 14

Cabrera, O.L., 47, 60
Cadrin, G., 25
Calamera, J.D., 44
Cambier, E., 22
Campbell, J., 15
Capitan Pedro, G., 49
Carrington, L., 13
Carlson, A.V., 17, 17, 17, 05, 44
Carter, W.L., 34
Carson, J.E., 46
Carter, J.H., 47
Castelda, D.A., 24, 29
Cathey, W., 13, 24, 27, 27, 28, 30, 31, 41
Cathman, P., 26
Cebula, T.A., 45
Chang, C.C., 23
Chang, K., 21, 29
Chapelli, J., 30
Chapman, M.A., 23
Chapelli, J., 31
Chapman, T., 30
Chen, A.M., 63
Chge, A.T.L., 31, 39
Chiu, D.J., 34, 44
Chow, M.W., 44
Christensen, M.L., 17
Christian, V., 30
Chalon, J.D., 12, 31, 33, 38, 46, 48
Clark, D., 37, 27, 37, 43, 69
Clough, T., 43
Collins, C.C., 49
Colyer, S.P., 28
Conner, M.K., 33
Correa, D., 49
Cornell de Nava, C., 33, 34, 38
Cotton, D.B., 43
Cox, M., 30
Cook, T.E., 18, 69
Craig, C., 28
Crawford, T.L., 63
Crosby, R.M., 32, 45, 9
Cuthill, L., 22
Curtis, S.D., 42

Dahl, T.A., 34
Daniels, C.B., 63
Dashwood, R.H., 46
Davidson, D.M., 27
Davidson, C., 46
Davis, M.H.
Davis Gibson, R.A., 63
De Wilde, D., M.D., 34
Del Sarto, R.A., 9

2501644882

06 NOV 90 tg

CRC CONTRACT RESEARCH CENTER

CONTINUATION ON MICROFICHE:

F 0679

2501644883

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

Deahl, J.T., 49
Deutsch, K.J., 15
Dolich, R.A., 30, 30
DeMarini, D.M., 21, 27, 31, 31, 62
Demizeau, F., 66
Dimnik, I.S., 56
Dobson, R.L., 51
Doerr, C.L., 27, 47
Donnelly, K.C., 30
Dooley, J.F., 28
Doolittle, D.J., 30, 66
Douglas, G.R., 15
Doung, H., 49
Downie, R.H., 46
Drobeisky, E.A., 50
DuFrain, R.J., 16
Dunbar, V.G., 22
Dunkel, V.C., 23

Engel, P., 17
Edwards, I., 51
Ehling, U., 39
Eisenstadt, A., 50
Elespuru, R.K., 45
Elmore, Ind., 29
Ennever, F.K., 43, 56
Epler, J.L., 34
Erexson, G.L., 48, 48
Erwin, D.N., 17, 56
Evans, H.H., 25
Everson, R.B., 15, 17, 17, 17, 68

Falkow, R., 13, 63
Falkow, A., 22
Farrelly, J.G., 45
Felton, J.S., 14, 25, 29, 33, 33
Ferguson, M.J., 61
Fischman, H.K., 68
Flessel, C.P., 23, 29
Fraser, A., 49
Freeland, G., 35
Fowler, R.G., 16
Fox, D.P., 32
Fox, M., 32
Francis, A.A., 34, 44
Friedman, E., 38
Frome, E.L., 28
Fry, R.J.M., 49
Fu, P.P., 46, 64, 64, 67
Fultz, E., 33
Furihata, C., 66
Fuscoe, J.C., 14

Galloway, S.M., 48
Ganguly, S.D., 53
Garcia, S., 46
Gomez, R.C., 15
Gingold, M., 47
Gluck, V.F., 28
Gulden, M.E., 16
Geard, C.R., 21
Gefferson, E.E., 31
Gentile, G.J., 57
Gentile, J.M., 57, 57, 62, 64
Georgiev, M., 21
Gibson, J.B., 67
Giglio, P.E., 26
Giorgetti, C.S., 53
Giroux, C.N., 63
Glickman, B.W., 14, 50, 50
Godek, E.G., 26, 26
Gold, A., 51
Goldberg, M.T., 35, 35
Goldman, I., 15
Goldring, J.M., 51
Goldstein, L., 35
Goldstein, E.A., 64
Goldsworthy, E.L., 35
Gomes, M., 30
Gomez, M., 34
Gomez Chavarin, M., 49, 68
Gonsebatt, M.E., 28
Gonzalez, D., 49
Guldin, A.J.E., 14
Gordon, J.A., 45
Gordon, L.A., 17
Gour, S., 30
Graham, M., 64
Grahn, D., 53
Green, N.B., 53
Greene, C.J., 15
Grosovsky, A.J., 30

2501644884

Gregorczyk, C.R., 44
Gupta, R., 61
Gupta, R.S., 61
Gyllenplan, J.B., 16
Gurman R., J., 32
Guzzie, P.J., 33, 62

Halpern, E.C., 48, 48
Halpern, M., 30
Hamilton, J.W., 63
Hammond, K., 35
Hammond, S.K., 35
Hanawalt, P., 18
Hannan, M.A., 46
Hanbach, P.R., 43, 44
Hartell, J.W., 28
Hartman, R.D., 29
Harkins, M., 28
Haroun, L., 56
Harper, D.J., 33, 47
Harris, M.M., 57
Hart, J., 13
Hartman, P.E., 14
Hasman, J., 68
Hassain, S.H., 29
Hauch, F.F., 29
Hawkinsmith, G.M., 32
Haworth, S., 47
Hay, C., 27
Hayashi, H., 35
Hayashi, T., 35
Healy, S.K., 14, 33
Heath, J.A., 65
Hebel, R.H., 12, 46, 64, 64, 64
Heinen, C.T., 62
Henderson, K.F., 66
Herrera, P.R., 66
Herlitz, U.G.G., 56
Herring, E., 55
Heroux Metcalf, C., 15
Hesick, L.S., 64
Hesselberg, T.W., 31
Heydenburg, D., 64
Hiatt, R., 15
Highsmith, R., 23
Hill, W.E., 45

Hix, C.E., 34
Hoar, D.I., 56
Hoffmann, G.R., 45
Holbrook, C.J., 48
Holden, H., 19
Hollander, D.A., 29
Honorn, G., 48, 48
Hook, G.J., 14, 49
Hooper, K., 15
Hoscmysky, G.J., 26
Hosk, V.S., 31, 31, 62
Howard, P.C., 25
Hozier, J., 27, 27, 66
Hrelia, P., 65
Hsie, A.W., 52, 52
Hsieh, D.P.H., 45
Hughes, F.J., 35, 46
Humphrey, P.R., 54
Hunter, T.C., 52, 68
Hurd, M.E., 67, 67

Igelhart, J.D., 31
Inman, J.P., 21, 31
Irons, R., 16
Irvin, T.R., 46
Ishida, R., 17
Ivell, J.L., 66

Jacobson Kram, D., 49
Jain, K., 65
Jegg, P.A., 34
Jenkinson, F.V., 53
Jensen, R.H., 17, 17, 34
Jewell, C.S., 54
Johnson, J.W., 31
Johnson, G.V., 56
Joiner, F., 28
Jones, I.M., 65
Jowsa, D., 66

Kadlubar, F.F., 46
Kado, N.Y., 35, 49
Kalinowski, D., 57
Kimeni, R.M., 21
Kirsi, F., 57
Kissi, H., 35

2501644885

Kasweck, K., 22
Katz, M., 20
Kaufman, F.R., 44
Keller, R., 30
Kelley, K.T., 32
Kennelly, J.C., 15
Kier, L.D., 12, 18
Kim, K.S., 63
Kimball, E.S., 87
Kimmel, P.A., 32
King, L., 21
Kirk, A.M., 31
Kirkland, D.J., 15
Kirk-Younge, C.L., 65
Kitchin, R.M., 56
Klemholz, A., 51
Klotsch, U., 20
Klugerman, A.D., 48, 48
Kruze, M.G., 29, 33, 35
Knott, R.B., 51
Knowles, S., 53
Koran, R.M., 23
Koch, W.H., 53
Korkhir, J.S., 49
Kozin, L., 45
Kuikman, A., 47
Kuitz, J.P., D.W., 28
Kuhle, R., 27, 27
Krueger, M., 35
Krishna, G., 20, 20
Kupke, M.L., 41
Kusumoto, F.R., 63
Kunz, B.A., 63
Kundas, C.D., 47
Kwan, T.C., 51

Laclaste, L., 57
Laurer, A., 30
Lamb, V., J.C., 29
Lambert, J.B., 64
Landolph, J.R., 21, 33
Landolt, M.L., 23
Lang, R., 13
Langenbach, R., 28, 53
Langlois, R.G., 17, 17, 34
Lapman, R.C., 65
Larimer, F.L., 57
Lavappa, K.S., 53
Lawlor, T.F., 47
Lazarkin, V., 30
Lebowitz, H.E., 66
Lee, G.K., 30, 30, 66
Lee, D.A., 30, 66
Lee, E., 28
Lee, P.S., 62, 62
Legator, M.S., 22, 22, 33, 47, 48, 51, 56, 68, 69
Lerman, S.A., 62
Leu, R., 32
Lewin, I., 21, 23, 30, 35, 68
Li, A.P., 17, 31
Li, X.M., 62, 68
Li, X.Y., 49
Little, J.E., 45, 52
Liu, M., 39
Lockard, S.L., 48
Lippert, M., 62
Luk, J.H., 32, 52
Lutkenhoff, L.O., 28
Lofroth, G., 30, 35
Lohman, P.H.M., 56
Loh, S.A., 45
Lohney, A.L., 67
Lee, E., 28
Lamy, F.J., 35
Loveday, K.S., 38
Lowe, J.E., 30
Lowe, K.A., 48
Lowe, W.R., 56
Lowery, M.C., 31
Lucas, G.W., 64, 64
Lugo, M.H., 66
Luke, C.A., 47, 57, 48
Lutz, A., 13

Ma, T.H., 57, 57, 63
Macgregor, J.T., 15, 66
Machado, M.L., 47
Maclaren, M.A., 30, 44
Mackey, J.M., 32
Mackerer, C.R., 28, 30, 30
MacKenzie, G., 32

2501644886

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

MacLaren, R.A., 48
Macphee, D.G., 16
Malea, V.M., 17, 50
Mallhes, J.B., 67
Mazeika, J.B., 27
Margison, G.P., 32
Marguin, H., 69
Marion, M., 66
Marsden, P.J., 29
Masri, M.S., 52
Matheson, D.W., 27
Matsushima, T., 66
Matthews, R.J., 26, 26, 26, 26
Maula, T.T., 15, 46
Mayo, F., 43
Mazur, M., 50
Mariwek, J., 49
Mlhee, K., 22
McCalla, D.R., 61, 64, 64
McKinney, M.A., 16
McGown, K.J.T., 17, 50
McCoy, E.E., 16
McCurdy, S.M., 35
McLeod, G., 27
McGuinnis, M.J., 34
Mcgregor, D., 26, 51
McKee, R.H., 33, 62
McKenzie, W.H., 28
Mcdra, J.A., 50
Mcsa, B.J., 44
Mcgan, R., 25, 27
Meyer, J.R., 49, 51
Meloy, M.L., 33, 56
Menell, J., 29
Mcdcle, M., 69
Mendiola, M.T., 33
Mcrg, K., 34
M, P., S., 12
Middleton, W.R., 14, 1
Millbrandt, M.V., 29
Miller, I.R., 57
Miller, M., 61
Millner, G., 29
Minkler, J.L., 25, 44
Mirsalis, J.C., 31
Mirzayans, R., 29
Mitchell, A.D., 28, 61
Miura, T., 31
Miyazawa, T., 35
Mole, C.D., 43
Mole, K.L., 67, 67
Mohabbatnejad, E., 33
Monroe, I., 69
Monteith, L.G., 35, 46
Mottram, J.C., 34, 49, 68
Mowe, M.M., 15, 27, 27, 27, 31, 47
Morales Ramirez, P., 53
Morland, J.M., 21
Mori, T., 25
Morin, M.J., 56
Morrissey, R.L., 29
Morrissey, R.L., 43
Mortelmans, K., 52
Mosca, M.J., 67
Moskal, M.L., 33
Mullin, F.D., 45
Mulks, K., 55
Mulvihill, J.J., 39
Munford, H.L., 23, 35, 62, 68
Munnery, V.J., 35
Murello, L., 65
Murphy, D.D., 29
MacNamara, O.M., 28
Myers, C.A., 51
Myers, G.H., 35
Myers, J.F., 46
Myhr, B., 29

Nagao, M., 33
Nagao, T., 56
Naito, R.S., 50
Nartmit, R.W., 26, 26, 26, 26, 30, 44
Nardelli, R.C., 26, 30
Narod, S.A., 15
Nath, J., 20, 20, 50
Neci, J., 59
Nelson, R., 28
Nesnow, S., 62, 69
Nestmann, E.R., 15, 57
Neuhauser Klaus, A., 13
Newman, D., 48
Ni, Y.C., 46

2501644887

Nicklas, J.A., 52, 68
Nilan, R.A., 51
Nishimura, S., 35
Nokta, M.A., 56
Nordstrom, F., 30
Nottmann, T., 17
Norpoth, K., 33

O'Donnell, M.W., 53
Ohara, Y., 35
Okinaka, R.T., 44, 45
Oldham, J.W., 48
Olesen, F.B., 12
Olivieri, G., 14
Olsen, H.E., 45
Olvera R., O., 32
O'Neill, J.P., 15, 52, 68
Ong, T., 20, 20, 46, 50, 52
Onigbinde, T.A., 65
Ormiston, B.G., 47
Ou, J., 64
Oshiro, Y., 26
Ostrosky-Wegman, P., 34, 69, 68
Owen, W.M., 51

Pagano, D.A., 46, 50, 52
Pilowski, N., 31
Pancorbo, O.C., 43
Panneerselvam, N., 62
Pannell, R., 46
Paolini, M., 65
Paquette, D.F., 47, 48
Pardo, K., 15, 28
Parker, K.R., 57
Parton, X., 52
Pasley, T., 31
Paterson, M.C., 29
Patterson, S.R., 21
Payne, W.L., 45
Pelroy, R.A., 50
Penman, B., 28
Pereira, F.P., 68
Perez, C., 55
Peters, B., 15
Peters, J.H., 62
Phillips, R.D., 62
Pierce, M.K., 63
Pinkel, D., 36
Piper, C.E., 26, 47, 47
Plancarte, A., 49
Plewa, M.J., 56, 57, 57, 57, 57, 62
Poiker, M.C., 68
Polloway, T., 26
Poorman, P.A., 27
Popp, J.A., 35
Power, G.H., 53
Poller, A.A., 37
Pourat, J.R., 14
Preikin, R.F., 48
Preston, R.J., 12, 14, 26, 49, 49, 56
Przygoda, R.T., 31
Purvis, S.F., 43
Putman, D.L., 62

Rahn, C.A., 66
Raj, A.S., 21
Ramanujam, V.M.S., 22, 33, 48
Randall, V.G., 52
Randerath, E., 68
Randerath, K., 68
Rao, T.K., 12, 53
Rapan, E., 65
Raschhofer, H.P., 66
Rasmussen, H.E., 25
Ray, V., 69
Reardon, I.T., 53
Reiss, I., 52
Reed, E., 68
Reed, E.A., 30
Reddy, B.A., 63
Regan, J.D., 34, 34, 44
Reidy, J.A., 32, 32
Reim, E.J., 62
Remsen, M.A., 49
Reynolds, R.J., 34, 44
Rich, C., 26
Rieco, E.S., 62
Richardson, K.K., 32, 45
Rinkus, S.J., 33
Rittenbach, K., 22, 51
Roberts, M.R., 48
Robertson, I.G.C., 66

2501644888

Robiano, S.H., 44
Rocha, D.G., 29
Rogers, O.O., 15
Rogers, S.J., 46
Rogers-Buck, A.M., 62
Roman, J., 30
Ronald, R.C., 51
Rosenkranz, H.S., 19, 43, 56, 69
Ross, V.C., 65
Rossman, T.G., 25
Rubin, L.M., 25
Rudd, C.J., 15, 28, 62, 62
Rudd, N.L., 56
Ruff, I., 30
Rutch, M., 49
Russell, J.H., 50
Russell, L.B., 13
Russell, W.L., 51

Sabourin, P.J., 66
Salazar, E.P., 25, 44
Sanchez, J.H., 31
Sandhu, S.S., 22, 31, 56, 62
Sangaiah, R., 51
SanSebastian, J.R., 26
Sapigni, E., 65
Sasa, E.J., 50
Sato, S., 35
Sawin, V.L., 22, 22
Sawyer, J., 27
Schaub, M., 53
Schaefer, J.B., 32
Scheinker, M.B., 35
Schild, D., 18
Schigin, V., 53
Schol, H.M., 26
Schreiner, C.A., 28, 30, 30
Schroder, C.H., 52
Schwartz, J.L., 16
Schy, W.E., 57
Sedor, D.D., 48
Sega, G.A., 51
Seidenberg, J., 62
Seifert, A.M., 34
Seila, R., 33
Seiger, K.H., 53
Shadduck, J.G., 26, 29
Shelley, J.D., 14
Shafer, D.A., 22
Shafik, H.M., 56
Shah, B., 12
Shahied, S.I., 46
Shane, B.S., 33, 62
Sharief, Y., 53
Shallip, I., 17
Sharma, C.B.S.R., 62
Shedroff, A.H., 43
Shelby, M., 19, 69
Shen, N.H., 14, 29, 33
Shen, C.W., 23, 53
Shepart, L.R., 52
Silburn, K.A., 16
Simmons, D.M., 35
Simmons, D.S., 46
Singh, B., 61
Singh, N., 36
Skopek, T.R., 32, 45
Sleinski, R.S., 62, 62
Smith, A.T., 44
Smith, C., 47
Smith, C., 55
Smith, D., 15
Smith, K.R., 21
Smith, P.A., 15
Smith, P.M., 22
Smith Oliver, T., 35
Soler, I.M., 20
Sorsa, M., 20
Spak, D.K., 31
Spalding, J.W., 23
Sprague, K.M., 45
Stark, H.F., 56
Stanfield, W.L., 20, 61
Stankowski Jr, L.F., 12, 25, 26, 26, 26, 26, 43
Stark, A.A., 52
Stasiewicz, S., 23
Stay, E.E., 26
Steele, V.E., 29
Steinmetz, K.L., 31
Stevens, B., 23
Stewart, B.E., 49

2501644889

06 NOV 90 18

Stewart, D.L., 45, 50
Stewart, J., 46, 52
Stewart, K.R., 62
Stewart, M.L., 45
Stewart, S.A., 25, 44, 44
Stoner, G.D., 43
Stoppler, M., 68
Strauss, T., 51
Strauss, O.H.S., 20, 61
Strauss, O.F., 34, 44, 45
Stroot, C.L., 65
Stuart, E.W., 23
Sugg, D., 25
Sugimura, T., 33, 39
Suk, W.A., 23
Sullivan, L.M., 15, 52
Swartz, T., 34
Swenson, D., 43
Swierenga, S.H.H., 29
Sacklik Salem, J., 25

Tachibana, A., 17
Tainer, B.A., 49
Takebe, H., 17
Tan, H., 29
Tatsumi, K., 17
Taylor, J., 53
Taylor, K.I., 35
Taylor, R.T., 33, 33
Teal, C.M., 67
Tennant, R.W., 23
Teshuk, S.J., 35
Tessner, J., 34, 44
Theise, J.C., 43
Thielmann, H.W., 52
Thomas, H.P., 47
Thomas, S.M., 16
Thompson, C., 64, 64
Thompson, E.D., 63
Thompson, L.H., 18, 25, 34, 44, 44
Thornton Manning, J., 64, 64
Tice, R.R., 47, 47, 48, 68
Tindall, K.R., 25, 26
Tobias, C.A., 17
Toyoda, M., 17
Trivisano, M., 21
Troiko, J.E., 25
Trosclair, A.M., 53
Truchanes, M.W., 45
Truss, R., 43
Tucker, J.D., 17, 17, 25
Tumas, W.G., 26, 26, 26, 26
Turner, J.H., 33
Turner, N.T., 27
Turucci, L.J., 45
Tyler, S.J., 33

Ulrich, L.E., 64, 64, 64

Valaio, H., 56
Valencia, R., 43
Valtierra, R.M.E., 57
Van Arnold, J.D., 23
Van der Sluis, D., 43
Van Hight, C.C., 45
Vedelago, A.M., 35
Van Bortel, R.C., 57
Von Tungeln, L.S., 64, 64

Wadhams, A., 27
Wagner, E.D., 57
Wakabayashi, K., 33
Walker, G., 18
Walsh, D., 61
Wang, N.P., 64
Wang, Y.Y., 23, 29
Ward Jr., J.B., 15, 33, 68
Wargovich, M.J., 35
Warren, S., 23, 31
Waters, M.D., 56
Weber, C.A., 44
Wehr, C.M., 15, 66
Wei, C.I., 29
Weity, T., 32, 32
Westbrook Collins, B., 48
Wetterhahn, K.E., 63
Whitley, T.W., 45
Wheeler, W.B., 29
Wong, W.Z., 46, 52
Wharton Jr., E.B., 15, 22
Wiancko, J.K., 14, 14, 14
Wilkinson, B.P., 29

2501644890

06 NOV 90 tg

Williams, I.R., 49
Williams, K., 21, 30
Williams, L.R., 29
Williams, R., 31
Wilson, N., 30
Winegar, R.A., 49, 54
Winsor, B., 57
Winston, G.W., 53
Wiser, S.K., 43, 44
Wilcher, L.W., 28
Wolff, G.L., 43
Wolff, S., 14, 14
Working, P.K., 67, 67, 67
Woskie, S., 35
Wright, D., 32
Wrobel, J.A., 45
Wróblewski, D.H., 45
Wu, R., 14
Wyrobek, A.J., 17, 17, 17

Xu, Z., 57

Yager, J.W., 20
Yamasumi, Z., 35
Yan, Z.A., 49
Yandell, D.W., 52
Yang, J.L., 50
Yang, T.C., 17
Yano, M., 33
Yokoyama, S., 35
Yourice, D.M., 65
Yuan, Z.P., 67
Yuan, J., 38

Zeiger, E., 46, 49, 50, 52, 56, 61
Zhou, X.T., 49
Zielenska, M., 16
Zimmer, D.M., 43, 65
Zweidinger, R., 23

2501644891

Source: https://www.industrydocuments.ucsf.edu/docs/skhl0000

06 NOV 90

2501644892

Source: https://www.industrydocuments.ucsf.edu/docs/xkhl0000

2501644893

WEDNESDAY 8 APRIL

REGISTRATION
8:00 am - 5:00 pm — Ballroom Foyer

WORKSHOPS
9:00 am - 11:30 am
Research Needs for the Cytogenetic Testing of Industrial Chemicals — Ballroom 5

9:00 am - 11:30 am
Personal Computers and Data Management Systems in Genetic Toxicology — Ballroom 6

9:00 am - 11:30 am
The Spot Test With Mice — Parlors 1-3

PRESENTED PAPERS
1:00 pm - 3:00 pm
Molecular Mechanisms - Pathogenesis — Ballroom 5
Human Population Monitoring I — Parlors 1-3
Mammalian Cell Mutagenesis — Parlors 7-9
Cytogenetic Mechanisms — Ballroom 6

SYMPOSIUM
3:30 pm - 5:30 pm
Molecular Biology of DNA Repair — Ballroom 5

PUBLIC RELATIONS SYMPOSIUM
5:30 pm - 8:00 pm
Illegal - Genetic Consequences??? — Ballroom 5

THURSDAY 9 APRIL

REGISTRATION
8:00 am - 5:00 pm — Ballroom Foyer

PRESENTED PAPERS
8:30 am - 10:00 am
Complex Mutagens I — Parlors 1-3
Cell Transformation — Parlors 3-6
Cytogenetic Methods — Ballroom 5
Cytogenetic Testing I — Ballroom 6

POSTER SESSION I
10:30 am - 12:00 pm
Mammalian Cells in Vitro — Ballroom 4
Complex Mutagens — Ballroom 4
Tumor Promotion — Ballroom 4
Cell Transformation — Ballroom 4

PRESENTED PAPERS
1:30 pm - 3:30 pm
DNA Repair — Ballroom 5
Complex Mutagens II — Parlors 1-3
Mammalian Cells in Vivo — Parlors 7-9
Human Population Monitoring II — Ballroom 6

SYMPOSIUM
4:00 pm - 6:00 pm
New Approaches in Environmental Mutagenesis — Ballroom 5

AWARDS AND RECEPTION
6:30 pm — Ballroom 5

FRIDAY 10 APRIL

REGISTRATION
8:00 am - 5:00 pm — Ballroom Foyer

SYMPOSIUM
8:30 am - 12:00 pm
Mutagenic Basis of Human Disease — Ballroom 5

BUSINESS MEETING
12:00 pm - 1:00 pm — Ballroom 5

SPECIAL LECTURE
1:30 pm - 2:30 pm
Dr. T. Sugimura, Information of Cancer Research and Environmental Mutagen Studies — Ballroom 5

POSTER SESSION II
2:30 pm - 4:00 pm
Risk Assessment — Ballroom 4
DNA Repair — Ballroom 4
Prokaryotic Studies — Ballroom 4
Cytogenetics — Ballroom 4

PRESENTED PAPERS
4:00 pm - 6:00 pm
Prokaryotic Mutagenesis — Ballroom 5
Molecular Mechanisms in Mammalian Cells — Ballroom 6
Metabolism — Parlors 1-3
Germ Cell and Heritable Mutagenesis — Parlors 7-9

SATURDAY 11 APRIL

REGISTRATION
8:00 am - 12:00 pm — Ballroom Foyer

SYMPOSIUM
8:30 am - 11:30 am
Role of Immunology in Genetic Analysis — Ballroom 5

PRESENTED PAPERS
1:30 pm - 2:30 pm
Cytogenetic Testing II — Ballroom 5
Mechanisms in Non-Mammalian Eukaryotes — Parlors 1-3
Plant Genetic Toxicology — Parlors 7-9
Test Strategies and Assessment — Ballroom 6

POSTER SESSION III
2:30 pm - 4:00 pm
Test Batteries — Ballroom 4
Plants, Fungi, Drosophila — Ballroom 4
Fish, Amphibians, Birds — Ballroom 4
Metabolism — Ballroom 4
Mammalian Cells in Vivo — Ballroom 4
Mammalian Germ Cells — Ballroom 4
Human Population Monitoring — Ballroom 4

SYMPOSIUM
4:00 pm - 6:00 pm
Short-Term Tests and the Risk Paradigm - A Critical Evaluation — Ballroom 5

Source: https://www.industrydocuments.ucsf.edu/docs/sknl0000